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14. ABSTRACT This study had two specific aims: 1) to document specific challenges and facilitators involved in family reintegration for women in the National Guard and Reserves who have recently returned from deployment; and 2) to develop and pilot test a telephone-delivered coping/support intervention using the theoretical framework of the Resiliency Model of Family Stress. Scope :This mixed methods research endeavor focused on women in several National Guard Units who had been deployed to combat areas and their reintegration processes with their families. Major Findings: Qualitative findings revealed five post-deployment categories that female soldiers felt had strongly affected them and had an impact on their families: (a) life is more complex, (b) the loss of military role, (c) deployment changes you, (d) re-establishing partner connections, and e) being mom again. Family reintegration was influenced by four general themes from deployment experiences: the general environment of stress, heterogeneous job responsibilities, home comes with you, and gendered stress. Deployed individuals had significantly higher PTSD scores (35.05 vs. 27.47, P < .001), significantly lower coping scores (9.02 vs. 9.95, p=0.0032) and significant higher family functioning scores (2.84 vs. 2.47 p=0.24). There were no significant differences in the four variables of depression, family hardiness and parenting strain and personal growth. Participants found that gaining stress management skills was a strong benefit of participation in the the psycho-educational group—the nature of the group, that is, providing information and not on probing or directing the women in a particular direction was appreciated. Overcoming technical implementation challenges, a longer format and more information about mental health and illness and suicide was all requested. Significance: Despite considerable attention and resources brought to address post-deployment reintegration, many women in the National Guard have ongoing challenges. Distance from available Veteran's Administration resources make the implementation of technology-assisted interventions an area for future evaluation.					
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ABSTRACT

Purpose

This study had two specific aims: 1) to document specific challenges and facilitators involved in family reintegration for women in the National Guard and Reserves who have recently returned from deployment; and 2) to develop and pilot test a telephone-delivered coping/support intervention using the theoretical framework of the *Resiliency Model of Family Stress*.

Scope

This mixed methods research endeavor focused on women in several National Guard Units who had been deployed to combat areas and their reintegration processes with their families.

Major Findings

Qualitative findings revealed five post-deployment categories that female soldiers felt had strongly affected them and had an impact on their families: (a) life is more complex, (b) the loss of military role, (c) deployment changes you, (d) re-establishing partner connections, and e) being mom again. Family reintegration was influenced by four general themes from deployment experiences: the general environment of stress, heterogeneous job responsibilities, home comes with you, and gendered stress.

Deployed individuals had significantly higher PTSD scores (35.05 vs. 27.47, $P < .001$), significantly lower coping scores (9.02 vs. 9.95, $p=0.0032$) and significant higher family functioning scores (2.84 vs. 2.47 $p=0.24$). There were no significant differences in the four variables of depression, family hardiness and parenting strain and personal growth.

Participants found that gaining stress management skills was a strong benefit of participation in the the psycho-educational group—the nature of the group, that is, providing information and not on probing or directing the women in a particular direction was appreciated. Overcoming technical implementation challenges, a longer format and more information about mental health and illness and suicide was all requested.

Significance

Despite considerable attention and resources brought to address post-deployment reintegration, many women in the National Guard have ongoing challenges. Distance from available Veteran's Administration resources make the implementation of technology-assisted interventions an area for future evaluation.

Key Words: females, military, National Guard, reintegration, deployment, family functioning

TABLE OF CONTENTS

	Page
INTRODUCTION.....	4
BODY	
Approved Statement of Work.....	5
Personnel.....	6
KEY RESEARCH ACCOMPLISHMENTS.....	7
REPORTABLE OUTCOMES	
Phase 1.....	8
Phase 2.....	13
Phase 3.....	20
CONCLUSIONS.....	25
REFERENCES.....	26
BIBLIOGRAPHY OF PRESENTATIONS/PUBLICATIONS.....	36
APPENDIX 1	
APPENDIX 2	
APPENDIX 3	
APPENDIX 4	
APPENDIX 5	

INTRODUCTION

The National Guard and Reserves have provided critical military service in the combat zones of Iraq and Afghanistan since 2003 and currently constitute half of the United States' military capability. Women make up 20% of this population, with female soldiers now filling many of the roles traditionally filled by males. In a change from previous practices, large numbers of women, many of them mothers with school-age children, have been deployed to combat zones. At the same time, the lines between combat and non-combat roles have blurred, resulting in higher rates of combat-related morbidity and mortality among women soldiers than have been seen in previous wars. The mental health sequelae of deployment in military women have been well documented and families left behind have struggled to function without mothers and wives. On return from deployment, all soldiers face the challenge of reintegration into family life and society, but women from the National Guard and Reserves face the additional challenge of reintegration in isolation without the camaraderie provided by the military units of full-time soldiers or daily interactions with others who have shared the experiences of deployment. This isolation, combined with the reality of reintegrating with families, can be especially difficult for women who had not previously developed the support and coping skills that are now necessary to renegotiate family roles after their absence. For women from rural areas, emotional isolation can be exacerbated by physical isolation and the lack of a peer group of female veterans in their communities. The toll on family relationships and functioning resulting from the stress of reintegration on top of the stress of combat is detrimental to military families, to unit functioning and to society as a whole. Interventions that are cost-effective and that can be disseminated to National Guard and Reserve units across the country are urgently needed. The ultimate goal of this research was to create an effective intervention that can contribute to the positive reintegration of women in the National Guard and Reserves into their civilian and family lives, which in turn will promote beneficial mental health outcomes for military families and our society. This mixed methods study addressed two specific aims:

- 1) Document specific challenges and facilitators involved in family reintegration for women in the National Guard and Reserves who have recently returned from deployment, and
- 2) Develop and pilot test a telephone-delivered coping/support intervention using the theoretical framework of the *Resiliency Model of Family Stress*.

A mixed methods design was implemented in three sequential phases. **Phase 1** was a qualitative exploration of women's experiences (N=42) during reintegration collected through individual interviews with a sample of women in the National Guard and Reserves who had been deployed in combat zones. Data from Phase 1 was used to finalize instrument selection for an internet based survey administered, in **Phase 2** to a second sample of 239 women from the same population, which provided generalizable quantitative data. Findings from Phase 1 and Phase 2 were used to develop a telephone-based intervention in **Phase 3** that was pilot-tested and evaluated using both quantitative and qualitative methods.

BODY

Approved Statement of Work (Revised 8/8/11)

Specific Tasks & Timeframe

Task 1. Complete preliminary arrangements for study implementation

- 1a. Obtain IRB approval from University of Missouri-Kansas City and from relevant Department of Defense ethics panels (Months 1-6)
- 1b. Work with CDMRP to finalize appropriate population and obtain access to population (Months 1-12)

Task 2. Conduct Phase 1 focus groups

- 2a. Recruit focus group sample (N=100) through email solicitation of selected service organizations (Months 16-18)
- 2b. Conduct 10 focus groups (Months 16-18)
- 2c. Transcribe data from focus groups (Months 17-19)
- 2d. Analyze data from focus groups (Months 20-24)

Task 3. Conduct Phase 2 survey

- 3a. Use focus group findings to specify instruments for survey (Month 24)
- 3b. Recruit survey sample (Months 24-26)
- 3c. Analyze survey data (Month 26-30)

Task 4. Triangulate data

- 4a. Re-analyze focus group and survey data as an integrated unit to develop content for pilot intervention (Months 30-32)
- 4b. Specify instruments for evaluation of pilot intervention (Months 30-32)

Task 5. Implement pilot intervention

- 5a. Recruit for pilot intervention (N=60) (Months 32-34)
- 5b. Collect baseline data from participants in pilot intervention and comparison groups (Months 34-36)
- 5c. Implement pilot intervention (Months 36-42)
- 5d. Collect field notes (Months 36-42)
- 5e. Collect follow-up data from participants in pilot intervention and comparison groups (Months 38-44)
- 5f. Implement intervention with comparison group (Months 44-50)

Task 6. Final data analysis and dissemination

- 6a. Analyze quantitative data (Months 50-54)
- 6b. Analyze qualitative data (Months 50-54)
- 6c. Triangulate quantitative and qualitative data to assess pilot intervention (Months 50- 54)
- 6d. Disseminate findings (Months 54-60)

PERSONNEL

Personnel who have received pay from the research effort:

- Patricia J. Kelly, PhD, MPH, APRN
- Johanna Nilsson, PhD
- LaVerne Berkel, PhD
- An-Lin Cheng, PhD
- Keyna Chertoff, MA

KEY RESEARCH ACCOMPLISHMENTS

- Completed tasks in Approved Statement of Work
- Disseminated findings through nine oral/poster presentations and six peer-reviewed publications.

Reportable Outcomes

PHASE 1

Phase 1--Methods

As part of a larger study on women's family reintegration experiences, semi-structured interviews were conducted with 42 members of National Guard units from the states of Iowa, Kansas, Missouri, Nebraska and North Dakota. Their ages ranged from 23 to 58 (mean= 35 years, SD = 10 years). The majority (31/72.1%) was deployed once; 12 (28%) were deployed twice, and 3 (7%) three times. Iraq was the most common deployment destination with 28 soldiers (65%) deploying there at least once and 12 soldiers (28%) deploying to Afghanistan at least once. Deployments lasted from three weeks to 16 months (mean = 10 months, SD = 3.36 months). At the time of the interview, 17 (40%) participants were married, 14 (32%) were divorced, and the remainder single, separated, or engaged; half had at least one child. Ten of the participants who were married at the time of their deployment were divorced at some point afterward.

Permission was secured from each state to recruit women from their units via word of mouth, flyers posted at National Guard units and announcements on units' Facebook page. Interested women contacted the investigators and a convenient time for an interview was arranged. Interview questions centered on reintegration experiences (the aim of the parent study) and their precedents during deployment. An information sheet approved by the university Institutional Review Board and by the Office of Research Protections of the United States Army Medical Research and Materiel Command was read to each woman before initiating the interview. All interviews were audio-taped.

Data Analysis

Data was transcribed verbatim and checked against the original recordings. All quotes in the initial analysis that were coded as deployment-related were grouped for the current analysis. Guided by techniques of content analysis, transcripts were reviewed and significant statements and key phrases assigned codes by the lead author and confirmed by co-authors, with areas of disagreement discussed and resolved (Krippendorff, 1980). Coded statements were organized into concept clusters of related content (Miles & Huberman, 1984). An audit trail was maintained, documenting the position of text material from which themes were developed. Two recently deployed women verified the themes, one from the sample and one an outsider reader. Their feedback was integrated into the final manuscript.

Phase 1—Results 1

The ages of the 42 participants ranged from 18 to 58 years (mean=35, SD=10). The average length of deployment was 9.5 months (SD=4); the majority (31/72.1%) was deployed once; 12 (28%) were deployed twice, and 3 (7%) three times. Iraq was the most common deployment destination with 28 soldiers (65%) deploying there at least once and 12 soldiers (28%) deploying to Afghanistan at least once. Deployments lasted from three weeks to 16 months (mean = 10 months, SD = 3.36 months). Women had returned from deployment in the time period from a few months to over ten years ago. At the time of the interview, 17 (40%) participants were married, 14 (32%) were divorced, and the remainder single, separated, or engaged; half had at least one child. Ten (23.8%) of the participants who were married at the

time of their deployment were divorced at some point afterward. At the time of their deployment, 12 (27.9%) were not married. These demographics are shown below in Table 1. Of the women who were married, almost half (21/48.8%) had spouses who were also in the military.

Table 1--Demographics of Participants N=42

Demographic	N/%
Age	
<20	2/ 4.7%
20's	10/23.2%
30's	5/11.6%
40's	9/40.9%
50's	1/2.3%
Unknown	16/39.5%
Current Marital Status	
Married	17/40%
Divorced	14/32%
Other	11/28%
Number of Children	
0	15/34.9%
1	5/11.6%
2-3	12/27.9%
4 or more	4/9.3%
Unknown	6/16.3%
Number of Deployments	
1	31/72.1%
2	10/23.2%
3	1/ 2.3%

The results revealed five categories, related to post-deployment, that female soldiers felt had strongly affected them and had an impact on their families: (a) *life is more complex*, (b) *the loss of military role*, (c) *deployment changes you*, (d) *re-establishing partner connections*, and e) *being mom again*. Specific quotes for these categories can be found in Appendix 4 and 5.

Life is More Complex

For all of the women, reintegration was a long awaited event. However, the reality of U.S. civilian life brought several challenges, not all of which were anticipated. For example several women discussed the frustration and sense of helplessness they felt when faced with daily responsibilities of life that had once seemed “normal.” Planning, choosing among consumer options, and prioritizing and multitasking to manage activities of multiple family members had not been required of them while they were deployed. Rather, their tasks were assigned, singular, focused and routine. The challenge of returning to family complexity was initially intense and adaptation lasted from weeks to months after return.

The two goals for soldiers on deployment were ensuring that one's job was done well and staying safe. Other aspects of civilian life, like caring for a child or managing a household, were not present. These challenges were not only frustrating for many soldiers, but were debilitating and completely overwhelming for some.

The Loss of Military Role

The loss of the deployment role was a transition that was unexpectedly painful for some women, particularly those who did not have meaningful civilian job responsibilities or positions to which they could return. The pride that almost all of the women had when describing their military jobs and the appreciation they received for their contribution stood in stark contrast to the work that many found themselves doing on return. Some soldiers felt disappointment and a sense of abandonment after losing the civilian jobs they had prior to deployment.

In addition to the difficulty of no longer having a responsible job role, some women also had difficulty with their transition back to their family role(s). The contrast between the activities of a high adrenaline, high stress, dangerous military role – often perceived as heroic – to those of a wife and mother role, perceived as commonplace, was surprisingly – and sadly – disappointing for a few women.

Deployment Changes You

Most women reported strong emotional reactions to their deployment and reintegration experiences, both positive and negative.

More commonly, however, women reported negative emotional reactions, such as anger, irritability, and impatience. For some women, these responses persisted for many months or longer. Some women indicated that their frustration and anger was directly related to their perception that people in the civilian world did not appreciate the importance of larger issues, or took certain liberties and conveniences for granted.

Re-Establishing Partner Connections

Moving back into spousal relationships was a major task of reintegration, which elicited responses ranging from joy to profound disconnect. Several women mentioned the awkwardness in the return to intimacy and reconnection. Several women who had distinctly negative experiences countered these positive comments.

Being Mom Again

In addition to the overall dynamics of families, there were the specific stressors of relationships with children. Developmental changes in children during deployment, their demands and their need for attention were a challenge. Finally, there were children's problems resulting from the deployment that had to be immediately addressed.

Phase 1—Results 2

Participants' comments centered around four general themes of their deployment experience: the general environment of stress, heterogeneous job responsibilities, home comes with you, and gendered stress.

General Environment of Stress

Deployment was generally a stressful experience whether considered from a physical or an emotional perspective. Working, eating and sleeping, all in an environment of physical danger, make up the day-to-day experience of military life for all soldiers in deployed situations. While access to food, water, toilets and a bed in which to sleep were available to all women, these were generally designed for function, not comfort, ease or privacy (for example, porta-potties vs. flush toilets). Opportunities for relaxation or decompression may have existed, but they were not mentioned by a single one of our participants.

Heterogeneous Job Responsibilities

Despite being officially barred from direct combat roles, participants had an amazing variety of roles, ranging from those traditionally filled by women (administrative assistant, cook) to those that few women have in civilian society (bodyguard, helicopter mechanic and crew chief). While some came to the military with relevant education and skills, others received training and education as part of their military experience to enable them to meet specific job responsibilities. The jobs brought with them an inherent level of physical and emotional stress for participants, who perceived them in a variety of ways. Other jobs provided satisfaction and even excitement.

Home Comes with You

Despite or perhaps because of the distance from home, the lack of ability to address family problems intruded on the experiences of many women. Partners, children and parents were all mentioned as sources of worry and concern that could only be minimally addressed from afar.

Gendered Stress

Even for women who had significant experience with the military, the day-to-day harassment during deployment in Iraq or Afghanistan – solely for being female - was a shock. It was a challenge to function as soldiers without constantly being reminded of their gender. Some discussed their segregated living quarters, which were provided in the spirit of caring or safety; however, separate quarters necessitated time-consuming logistics like having to wait for transport from these quarters. Such separation and resultant logistics could be used to undermine the competence of female soldiers by suggesting that females were less able to care for themselves and needed special accommodations. Other participants mentioned feeling observed in daily activities or of having to constantly prove competence and toughness. An alternative gendered response was that males become overly protective of the women with whom they worked or were close.

Phase 1—Relationship of Current Findings to Previously Reported Work

The first five categories from this analysis of interviews with deployed female National Guard soldiers (Life Is More Complex, Loss of Military Role, Deployment Changes You, Reestablishing Partner Connections, and Being Mom Again) were not mutually exclusive. Both the realization that life at home is more complex and the loss of a military role contributed to the myriad of emotional responses experienced by the women and their reacting differently to the world. In turn, these reactions affected and were affected by women's need to be mom again and reestablish partner relations. We suggest that these categories might be seen as multilevel, moving from individual (Deployment Changes You) to family (Re-establishing Partner Connections and Being Mom Again) to community (Life Is More Complex, Loss of Military Role).

The findings are similar to those found in a recent study of the reintegration experience of 22 Army nurses (Rivers et al., 2013). These researchers identified an almost identical theme to that found in this study that they called, It Just Changes You. They did not, however, see this theme as central to the reintegration experience. Participants in the study also characterized the critical Stress of Being Home and their challenges in the shift of a single focus on job performance to that of the multitasking necessary in daily living (Rivers et al., 2013). Interestingly, participants did not mention family as a major theme; however, this may have been the result of the phenomenological research method used by the researchers, which began their interviews with one leading question about the major experiences of reintegration and permitted

probes, “only for topics already introduced by the participants (p. 168).” Our findings add to and broaden understanding of reintegration beyond nurses to that of female soldiers in the National Guard. While the results of any qualitative study do not allow for generalizability, the similarities found in the sample of nurses (73% of whom were female) in the Rivers et al. (2013) study and the female soldiers from National Guard units in this study allow a beginning understanding of the importance of addressing the impact on the women and on their families.

The data from these interviews with women in National Guard units that had been deployed to combat areas were only a partial fit with the model of family stress that served as the theoretical basis of this study. The model suggested that appraisal, family functioning, coping actions, and the use of resources would affect the overall stressors. Certainly all five categories reflected the construct of stressors. The identified categories of Life Is More Complex, Deployment Changes You, and Loss of Military Role reflect the theoretical construct of appraisal/Reestablishing Partner Connections and Being Mom Again reflect the construct of family functioning. Consistent statements supporting homogenous categories of the use of resources or coping actions were not found. Participant responses to these questions were too diverse and uneven to group and did not have the strength of the other identified categories.

A particular challenge was that, although the two categories reflected family functioning (Reestablishing Partner Connections, Being Mom Again) during reintegration, the family structures of participants were dynamic. The people and relationships that were present during deployment or return had often changed by the time of our interviews—which occurred months or years after the event. This dynamic quality made it difficult for participants to describe and for the researchers to characterize how family structure and function at the time of deployment contributed to reintegration.

The resiliency model did not include a variable that focused on the responses and experiences of individual women (Deployment Changes You), including understanding how her responses to reintegration might differ from those of a male/husband/father. An exclusive focus on family, without regard to the specific roles of or changes in individual members does a disservice to military women. An initial or concurrent application of a more woman-centered or gender-specific framework that would allow for the processing of her experiences would provide a stronger basis for future interventions. An alternative framework that might be appropriate is that of identity theory (Lomsky-Feder, Gazit, & Ben-Ari, 2008). For National Guard members, the shift in responsibilities from their deployment to their civilian role is often extreme. Griffith (2011) suggested that individual understanding of these circumstances is an important factor in establishing effective coping and adaption.

Although family needs are a critical part of this experience, the behavioral health needs of female soldiers should be considered either prior to or concurrently with the needs of their families. Effectively attending to any physical, emotional, or psychological trauma women may have experienced, both early in and throughout the reintegration process, is likely to have an overall positive effect on their families. Other useful and, as yet, unaddressed research might examine how long the effects of deployment and family reintegration last and strategies that women have used for successful adaption. For practitioners, it is important to note that many members of the National Guard and Reserves live in communities without easy access to Veterans Administration services; others may not be eligible for those services. These citizen-soldiers and their families use community schools, primary care, and behavioral health services. An understanding of the reintegration experiences of all family members can help to ensure that their needs are met during this transition.

PHASE 2

Phase 2--Methods

We conducted an internet-based, cross-sectional survey in which participants were recruited from an informational email sent to women in the National Guard units of four mid-western states. Notices about the study were also placed on the websites and Facebook pages of the units. To answer our research questions, female military members who had and had not been deployed were invited to participate. Permission to conduct the study was received from the University Institutional Review Board and from the Office of Congressionally-Directed Medical Research's Ethics Board.

Sample/Population

All female service members in National Guard units from four Midwestern states were sent email invitations to participate in the survey. We calculated that 242 subjects were needed for the logistic regression analysis with odds ratio of 1.5 (Faul, Erdfelder, Buchner & Lang, 2009). This sample size calculation for two-tailed statistical tests was based on a power of 0.8, with a moderate effect size (0.3), and alpha equals 0.05, and was determined to be adequate to answer the primary research questions.

Instruments

Instrument selection to measure individual, family and deployment-related factors was guided by the variables of the Family Resilience Model and by the results of qualitative interviews specific to this topic (Kelly, Berkel & Nilsson, 2014). Basic *demographics* were collected for all participants, with 16 deployment-specific items for those who had deployed.

Individual level variables were assessed with the following instruments:

- *Depression* was assessed with the Major Depression Inventory (MDI), a self-report mood questionnaire developed by the World Health Organization's Collaborating Center in Mental Health (<http://psychology-tools.com/major-depression-inventory/>). Its 12 items ask how frequently one has been feeling each **over the last 2 weeks (e.g., "Have you felt low in spirits or sad?")**, with six choices ranging from 0 (at no time) to 5 (all the time). Higher scores indicate greater depression. The MDI been assessed to have good reliability and validity (Cronbach's alpha = 0.90) (Olsen, Jensen, Noerholm, Martiny & Bech, 2003).
- The presence of *symptoms of post-traumatic stress syndrome* (PTSD) was assessed with PTSD Checklist-Civilian Version Assessment (Weathers, Litz, Huska & Keane, 1994). Items are scored based on a 5-point rating scale (1 = not at all; 5 = extremely). This 17-item survey has good test-retest reliability (0.66) and good validity (Cronbach's alpha = 0.94) (Conybeare, Behar, Solomon, Newman & Borkovec, 2012). Higher scores indicated more symptoms.
- *Coping* was assessed with the 13-item checklist of commonly accepted positive (regular physical exercise, balanced) and negative (use of chemical substance to reduce anxiety) practices to maintain optimal mental health (DHHS, 1981). Items were asked in a yes - no format (e.g., "I have a supportive family around me," "I practice time management techniques daily"). Possible scores ranged from 0-13, with higher scores indicating better coping practices.

Family level variables measured were:

- *Family hardiness* or overall family health was assessed with the Family Hardiness Index (McCubbin, Thompson & McCubbin, 1987). This twenty-item instrument (examples include, "In our family, we have a sense of being strong, even when we face big

problems” and “In our family, we strive together and help each other, no matter what”) used a four-point response scale (false, mostly false, mostly true and true). The instrument has good overall internal reliability, with Cronbach’s alpha of 0.92 and test-retest reliability of 0.86 (McCubbin, Thompson & McCubbin, 1987). Higher scores indicated greater hardiness.

- *Family functioning* was assessed with the five-item Family APGAR. The instrument included the realms of adaptability (“I am satisfied that I can turn to my family for help when something is troubling me”); partnership (“I am satisfied with the way my family talks things over with me and shares problems with me”); growth (“I am satisfied that my family accepts and supports my wishes to take on new activities or directions”); affection (“I am satisfied with the way my family expresses affection and responds to my emotions, such as anger, sorrow, or love”); and resolve (“I am satisfied with the way my family and I share time together”) (Smilkstein, 1978). Three responses are possible: 0=“hardly ever”, 1= “some of the time” and 2=“almost always”. Possible scores range from 0 to 10; higher score indicates a greater satisfaction with family function; scores of 8-10 are considered to be highly functional. Cronbach’s alpha values reported across studies using the Family APGAR have ranged from .80 to .85 (Smilkstein, 1978). The instrument is considered to be a valid and reliable measurement of family vitality (Mengel, 1987; Smilkstein, Ashworth & Montano, 1982).
- *Parenting strain* was assessed with seven items adapted from Kandel, Davies and Raveis, (1985) which asked the level of difficulty providing for children’s daily care, their financial, physical, emotional, social and educational needs, and the extent of conflict between children and work responsibilities. Responses were made on a five-point Likert scale ranging from 0 = “not difficult at all” to 5 = “extremely difficult”, with higher scores indicating greater strain. Cronbach’s alpha for the scale is 0.77 (Kandel, et al., 1985).

Statistical Analyses:

Demographic variables were calculated. To answer the research question, “What is the effect of deployment on women in the Nation Guard and their families?” we compared women who had and had not been deployed, with dependent variables of PTSD, depression, family functioning, family hardiness, parenting strain and stress growth while accounting for significant demographic variables as covariates. Due to the violation of normality assumption on the outcome variables, instead of using independent t-tests, ordinal logistic regression models were conducted to test for the effect of deployment; this non-parametric method can test main effect, account for covariates and address the violation of normality assumption at the same time (Zumbo, 1999). All statistical analyses were conducted using statistical software SAS version 9.2 with significance level set to 0.05.

Phase 2--Results

The average age of the 239 female participants was 34.8 years (range, 18-59, SD 10.3), with the 164 deployed participants being older (mean 37.5 years) than the 75 who had never deployed (28.9 years). Both groups had similar numbers of children (mean, 2.37 vs. 2.09); fewer of the deployed females were single/never married (25.5% vs. 35.5%). More deployed females had college degrees and/or attended graduate school (33.3%/19.4%) than those who never deployed (18.4%/18.4%) and were actual part-time employees of the National Guard (57.8% vs. 34.7%). These results are in Table 1.

Table 1. Demographic Variables of Sample

Variable	All Participants	Deployment- Yes Mean (SD) N/%	Deployment- No Mean (SD) N/%	P
Age	N=239 34.8 (10.3)	N=164 37.5 (9.6)	N=75 28.9 (9.1)	< .001
Number of children	N=241 2.28 (1.4)	N=165 2.37 (1.4)	N=76 2.09 (1.4)	0.143
Marital status	N=241	N=165	N=76	0.038
--Single, never married	69	42 (25.5%)	27 (35.5%)	
--Married/partnered	108	76 (46.1%)	32 (42.1%)	
--Divorced/separated/widowed	64	47 (28.5%)	17 (22.3%)	
Highest level of school	N=241	N=165	N=76	0.014
--High school/GED	20	8 (4.8%)	12 (15.8%)	
--Some college	106	70 (42.4%)	36 (47.4%)	
--College	69	55 (33.3%)	14 (18.4%)	
--Some graduate school	46	32 (19.4%)	14 (18.4%)	
Current relationship with Unit	N=241	N=166	N=75	0.004
--Member, attend monthly sessions	101	57 (34.3%)	44 (58.7%)	
--Employed part-time by Unit	5	3 (1.8%)	2 (2.7%)	
--Employed full-time by Unit	122	96 (57.8%)	26 (34.7%)	
--No longer a member	4	2 (1.2%)	2 (2.7%)	
	9	8 (4.8%)	1 (1.3%)	

For non-deployed females, there was a positive correlation between PTSD and depression, coping, family hardiness, family APGAR, and parenting strain (all $p < .01$). This group had a positive correlation between depression and coping ($p < .01$), family APGAR ($p < .05$) and parenting strain ($p < .01$). For deployed females, there was a positive correlation between hardiness and family APGAR, parenting strain, and age (all $p < .01$). Among deployed females, there was also a positive correlation with coping and hardiness, family APGAR, and age (all $p < .01$).

Table 2

Spearman Correlation Coefficients of Study and Demographic Variables for Deployed (below diagonal line) and Non-deployed (above diagonal line) Women

	PTSD	MDI	COPE	FHARD	APGAR	CARE	AGE	MAR	EDUC	GUARD	KIDS
PTSD		.44**	-.31**	-.48**	-.43**	.44**	-	-	-	-	-
MDI	.52**		-.33**	-	-.28*	.43**	-	-	-	-	-
COPE	-.47**	-.45**		.34**	.39**	-	-.26**	-	-	-	-
FHARD	-.39**	-.31**	.54**		.67**	-.41**	-	-	-	-	-
APGAR	-.38**	-.29*	.46**	.58**		-.33*	-	-	-	-	-
CARE	.47**	-	-.38**	-.36**	-.47*		-	-	-	-	-
AGE	-.23**	-	-	-		-.21*		.41**	.47**	.25*	-
MAR	-	-	-	-	-	-	.25**		-	.35**	.42**
EDUC	-	-	-	-	-	-	.20*	-		-	-
GUARD	-.20*	-.22**	.22**	.21*	.26**	-.27**	.09	.09	.17*		.26*
KIDS	-	-	-	-	-	-	.30**	.31**	-	-	

Note. * = $p < .05$, ** = $p < .01$;

For deployed women, $n = 149 - 166$ except for parenting strain variable, $n = 99 - 104$;

For non-deployed women, $n = 69 - 76$ except for parenting strain variable, $n = 37 - 39$;

PTSD = PTSD Checklist – Civilian;

MDI = Major Depression Inventory;

COPE = Coping Checklist;

FHARD = Family Hardiness;

APGAR = measure of family functioning;

CARE = measure of parenting strain;

AGE = participant age;

MAR = marital status;

EDUC = education level;

GUARD = relationship with the National Guard;

KIDS = number of children.

Deployed individuals had significantly higher PTSD scores (35.05 vs. 27.47, $P < .001$), significantly lower coping scores (9.02 vs. 9.95, $p = 0.0032$) and significant higher family functioning scores (2.84 vs. 2.47 $p = 0.24$). There were no significant differences in the four variables of depression, family hardiness and parenting strain and personal growth. These results are shown in Table 3.

Table 3. Comparison between Deployed and Never Deployed Participants

Variable	Deployment		P
	YES Mean (SD) N	NO Mean (SD) N	
PTSD	35.05 (16.23) N=155	27.47 (12.21) N=72	<.001
Depression			0.154
No depression—n (%)	139 (83.23)	66 (85.71)	
Mild --n (%)	6 (3.59)	5 (6.49)	
Moderate—n (%)	7 (4.19)	1 (1.30)	
Severe n (%)	15 (8.98)	5 (6.49)	
Coping	9.02 (2.48) 165	9.95 (2.25) 75	0.003
Family hardiness	64.98 (9.38) N=149	64.87 (10.96) N=70	0.414
Family functioning	2.84 (2.82) N=158	2.47 (2.99) N=74	0.024
Parenting strain	12.76 (5.37) N=104	12.62 (6.12) N=39	0.276
Personal growth	29.11 (13.44) N=163	28.22 (14.33) N=72	0.261

* Significant demographic variables age, marital status, highest level of school and current relationship with unit were included model to account for possible bias.

Phase 2—Relationship of Current Findings to Previously Reported Work

Military deployment and separation from family is a stressful event for all concerned. Family members carry these stressors, memories and emotions with them to the return process of reintegration. Women's absence from and return to families involves renegotiating a different set of roles than those filled by men. Changes in relationships at home and work will have shifted during the deployment, which itself may have been a positive or a negative experience. To account for special features that may be present in the population of National Guard families, this study compared the individual and family characteristics of women who were deployed to a combat zone with those who had not had a deployment. While a variety of studies compare these characteristics in men and women who have been deployed, few studies examine differences between deployed and non-deployed military groups.

Results showed that women in the National Guard who had been deployed had higher scores on the PTSD instrument but similar rates of depression when compared to women who had not deployed. Several researchers have reported on significant post-deployment PTSD rates. For example, Beder and colleagues (2011) found 22% of the 871 male and female members of the armed forces reported symptoms of PTSD. In a sample of 5,000 National Guard soldiers deployed to Iraq, researchers found rates of PTSD among

females to be 18% at three months and 17.9% at six months post-deployment among females (Riviere, Kendall-Robbins, McGurk, Castro C. & Hoge, 2011).

The finding of lower coping scores among the deployed group is an important one. However, from a cross-sectional study, it is not clear if problem coping strategies are instrumental in the development of PTSD. For deployed females, other known risk factors include combat exposure and injuries, military sexual trauma, and alcohol use, as well as reintegration challenges such as job instability or homelessness (Boyd, Bradshaw & Robinson, 2013). Subsequent functional coping with one or more of these risk factors would be a challenge for any woman. Murphy and Fairbank's 2013 review found few research-based interventions that are available for military families living in communities and the results of our qualitative work suggest that women in the National Guard would welcome venues in which to discuss their experiences (Kelly, Berkel & Nilsson, 2014).

Interestingly, no differences were found between the two groups on two of the three family level variables and one variable, family functioning, had significantly higher scores among women who had been deployed than among those who had not. These results suggest that National Guard families do have high levels of resilience and strengths. These findings about National Guard families support the conclusions of Sheppard and colleagues that "military families are not inherently "at risk" per se and may indeed be a healthy and robust group... [whose] robust stressors ... may make them a special population but not an at-risk population in general" (Sheppard, Malatras & Israel, 2010, p. 603-4).

Explanations for this finding point to the importance of assessing the developmental phase of the family and the presence of additional stressors. Younger families and those that have not previously worked through difficulties will not have these experiences from which to draw. On the other hand, if a family has multiple challenges, such as economic limitations, physical or mental health problems, the additional burden of deployment can be overwhelming (Interian, Kline, Janal, Glynn, Miklos & Losonczy, 2014). The presence of these potential contributors to family resiliency in deployed and never deployed women was not assessed in this study.

A second potential explanation, which intersects with the developmental phase, is the time since deployment. Family structure and function is dynamic and what existed at the time of deployment, even one year ago, can easily change. In this study, it was not possible to assess the impact of divorce, children growing and adapting to different family relationships contributed to reintegration family functioning, since participants responded to how their families performed now. While such an assessment is a challenge when retrospectively collecting data, cross-sectional pictures are equally limited unless one can identify a large enough sample to group families in time since return from deployment.

This fluidity also calls into question exactly how to apply the Family Resiliency Model. Do we consider it resilient for a woman to divorce and move on from a partner who was at best only minimally functional when she was deployed? Or would resilience be seen in keeping one's family together? Even families with strong, positive relationships can be torn apart by external stressors that come up over and above that of the deployment of mother and/or wife. Finally, the Model is gender-neutral, making no distinction between types of crises and stress, or between the deployment of a father/husband (more common, expected) or a mother/wife (less common, unexpected). While useful as a way to frame initial thinking and questions about the functioning of families of female military members,

we suggest that it is overly simplistic in its ability to capture the many varied factors of the reintegration process.

The limitations of this work include that of any convenience sample. Recruitment of a representative sample has been a challenge for military family researchers. Even studies that are presented to whole units find a disproportionate number of older participants, meaning less representation of the highest risk members of any military group (personal communication, Captain Angela Martinelli, March 2014). Recruitment strategies are needed that accurately reflect military populations and that balance adequate incentives with the ability to refuse participation.

Another limitation is the lack of a variable about the time since return from deployment. This information, plus the composition of the family at that point and in the present, would provide a more nuanced picture of the reintegration process and the variable nature of PTSD symptoms. An additional limitation is that the perspectives of family members are not reflected in this current work. An understanding of these experiences and their concordance with female military members would be an important area for future research. Finally, it is important to acknowledge that the minimal sample size could have affected the results of the analysis.

Contribution to Family Nursing Practice

The strengths and coping skills with which a woman returns from deployment will be important in the reintegration process. These results suggest that it is important for family nurses to recognize the importance of women's individual coping skills, even when focusing on family functioning. Interventions with the goal of improving coping skills are important for this population. An intervention that focused on women's coping skills, whether through peer support, stress management or individual counseling, would result in a win-win outcome for both improved individual and family functioning. Conversely, focusing exclusively on the family unit while ignoring women's coping abilities could easily result in a stalled situation. We suggest that nurses working with women in the National Guard and their families must assess both the family as a unit and the women as an individual to accurately understand the strengths and challenges of this population.

PHASE 3

Phase 3—Methods

There were four participants in Group 1 and four participants in Group 2 (total = 8). The number of deployments ranged from one to four, with three participants reporting being deployed one time, three reported 2 deployments, and 2 reported 4 deployments. Their ages ranged from 30 to 49 (Mean = 42, SD = 7). Four participants identified as White (50%), 2 as Latinas (25%), 1 as African American, (12.5%), and 1 as bi-racial (12.5%). The number of children they each had ranged from zero to three, and all 8 self-identified as heterosexual.

Measures

Coping Self-efficacy Scale (ref). The CSE scale is a 26-item instrument that measures self-efficacy for coping along three dimensions: problem-focused coping (12 items, e.g., “Think about one part of the problem at a time”), stop unpleasant emotions and thoughts (9 items, e.g., “Take your mind off unpleasant thoughts”), and get support from friends and family (5 items, e.g., “Get friends to help you with the things you need”). Participants were asked ‘When things aren’t going well for you, or when you’re having problems, how confident or certain are you that you can do the following’ and are asked to rate each item on an 11-item scale (0 – 10, where 0 means ‘cannot do at all’ and 10 means ‘certain can do’). Scores for the total scale can range from 0 to 286 with higher scores indicating greater perceived coping self-efficacy. Scores for the three scales were found to be reliable, with Cronbach alpha coefficients ranging from .80 to .91. Validity was established by examining relationships between CSE scales and other measures of psychological function, including ways of coping (Chesney, Chambers, Jonell, Johnson & Folkman, 2003).

Revised Ways of Coping Scale (ref). This 66-item questionnaire was used to measure processes participants may use to cope with specific stressful events. Participants were asked to describe a recent stressful situation and indicated to what extent they used each thought or action on a 4-point rating scale (0 = does not apply and/or not used; 3 = used a great deal). In the present study only six of the eight original sub-scores were used, (Confrontive Coping, 6 items, e.g., “Stood my ground and fought for what I wanted;” Self-controlling, 7 items, e.g., “I tried to keep my feelings to myself;” Seeking Social Support, 6 items, e.g., “Talked to someone to find out more about the situation;” Escape/Avoidance, 8 items, e.g., “Hoped a miracle would happen;” Planful Problem-solving, 6 items, e.g., “I made a plan of action and followed it;” Positive Reappraisal, 7 items, e.g., “I prayed”). Total scores were calculated summing items for each subscale, with higher scores indicating greater use of the process. The scale developers report reliability coefficients ranging from .68 (Planful Problem Solving) to .79 (Positive Reappraisal).

Family Crisis Oriented Personal Scales (F-COPES). The F-COPES is a 30-item questionnaire that identifies problem solving strategies used by families when faced with crises (McCubbin, Olson, & Larsen, 1991). F-COPES measures coping behaviors along five areas: Acquiring Social Support (10 items, e.g., “Sharing our difficulties with relatives”); Reframing (8 items, e.g., “Knowing we have the problem to solve major problems”); Seeking Spiritual Support (4 items, e.g., “Participating in church activities”); Mobilizing to Acquire and Accept Help (4 items, e.g., “Seeking information and advice from the family doctor”); and Passive Appraisal (4 items, e.g., “Watching television”). Participants indicated how closely each statement matched their own behavior or attitude using a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). All items on the passive appraisal subscale are reversed scored. Scores for the total scale can range from 30 -150 with higher scores indicating effective problem solving attitudes and

behaviors. Scores on the total F-COPES scale have been found to be reliable, with an alpha of .86. F-COPES has good concurrent validity as it has been found to correlate with other family measures.

Support Group Evaluation. This questionnaire was used 16 questions to assess participants' impressions of the group. They were asked to rate the first 12 items (e.g., "My participation in the group helped me to feel better about myself," "I felt connected to the facilitators of the group," "The group helped me to improve my ability to communicate and interact with others") on a 5-point Likert scale (1 = Strongly Disagree; 3 = Unsure; 5 = Strongly Agree). Participants were also asked to write their responses to four open-ended questions (e.g. "What aspects of the group experience were the most helpful to you?").

Procedures

Participants were recruited via a flyer sent through email to xxx National Guard and Reserve units nationwide. The flyer invited female service members who had been deployed to participate in a free four-week internet based psycho-educational group on family integration. Days and times of the confidential groups were offered and interested women were invited to call one of the group facilitators to arrange for a screening. Participants were told that they could receive up to \$100 for participating. Screening occurred via phone and addressed inclusion criteria (e.g., at least 18 years of age, access to the internet, overseas deployment in last three years) and exclusion criteria (e.g., currently abusing alcohol or drugs, suicidal or homicidal ideation, diagnosed with a psychotic disorder). Participants who passed the screen were sent a copy of the consent form and were asked to sign and return it. They were also asked for their zip code so that a list of community resources could be generated for them upon completion of the group. Twenty-one women were screened and all were deemed eligible for participation. They were assigned to groups based on whether they had children (one group for women with children; one group for women without children). Roughly half of the women were assigned to the wait list control groups (one for women with children, and one for women without children). There were a total of four groups formed. All participants were sent an e-mail with a link to a survey on Survey Monkey that included all of the pre-test measures (Coping Self-Efficacy, Revised Ways of Coping Scale, Family Crisis Oriented Personal Scales). As women completed the four session intervention, they were sent the link to the post-test survey, which included all of the pre-test questionnaires as well as the Group Evaluation form. Approximately four weeks after the conclusion of each group, participants were sent the questionnaires again (all but the group evaluation). All eight participants completed the pre-test measures. Seven of eight completed the post-test measures, and five participants were interviewed at the conclusion of the groups to learn about their experiences of the group.

Interviews

All group members were invited to participate in interviews about their experiences in the group; five consented. The semi-structured interviews were conducted by a research assistant who was not involved with the psycho-educational group design or delivery and addressed their reasons for participating, what they found most helpful about the group, what recommendations they would make for improvement, and other resources they used during or after the group. All interviews were transcribed.

Intervention

The four session psycho-educational intervention (Coping with Family Integration: An Internet Group for Women of the National Guard and Reserves) was developed by the group facilitators who are also the study researchers. Some content was borrowed from the Concern

Worldwide (U.S.) Inc.'s Innovations for Maternal, Newborn & Child Health Initiative; particularly, the content and format for the group norming session and the first session on stress was adapted from this resource. The remainder of the content was created based on a review of the literature and on research from earlier phases of this research program (e.g., Kelly, Berkel, & Nilsson, 2014; Kelly, Nilsson, & Berkel, 2014; Nilsson et al., 2014). This psycho-educational group addressed coping with stress/trauma and its effect on relationships, role change and relationships, and resources for self and others. Each session lasted about one hour and included both psychoeducation on the topic for the day as well as time for processing. The intervention was delivered via ZOOM Cloud Meeting, a video conferencing platform that allowed participants to join via their computers or handheld devices. Support group facilitators joined via computer at their offices in the university.

Data Analysis

Two female graduate students conducted the preliminary data analysis of the transcribed interviews. Consistent with qualitative research, they first discussed their potential biases and expectations of the data to minimize their impact on the interpretation of the data. These included the beliefs that reintegration with family members would be difficult for service members, that most women would find the group helpful because of their potential isolation and limited resources, and that women would report being highly motivated to participate in the group. Each graduate student reviewed each of the five transcripts individually. Based on the interview questions and their reading of the data, they each derived a list of themes and subthemes, then met together to compare the lists. Where there were differences, they discussed until consensus was reached. Once they agreed on the list of themes and subthemes, they both read through the first interview together, coded it separately, then compared codes, and made revisions as necessary. They then completed the other four interviews separately, compared, and made adjustments. The final step of the qualitative data analysis was the review of the data and themes by an auditor who was familiar with the study, but not part of the intervention or data collection. She agreed with the coding results for the themes, but made some suggestions to combine some of the subthemes for parsimony.

Phase 3--Results

Because of the small number of participants, inconsistent timing of the completion of the instruments, and the incomplete data for some participants, meaningful analyses of the pre- and post-test measure could not be completed. For the data that were available, the results seemed to be flat, with some participants reporting an increase in some areas of coping self-efficacy and ways of coping; some participants reporting a decrease in scores; and some participants reporting no change in scores.

At the conclusion of the group, in addition to the pre- and post-test measures, we administered a basic group evaluation questionnaire that assessed participants' attitudes and opinions about the group. On a scale of 1 (lowest) to 5 (highest), the highest ratings were (a) interest in joining the group, (b) establishment of clear expectations/norms for the group, (c) sense of connection with facilitators, (d) sense of connection with other women in the group, and (e) likelihood of recommending the group to others. See Table 1 for a complete list of Group Evaluation Questions.

An analysis of the interview data revealed four themes: (a) Reasons for Participation, (b) What the Women Got Out of the Experience, (c) Recommendations for Future Interventions, and (d) Other Resources Utilized.

Reasons for Participation. One of the first questions asked by the interviewer was why women chose to participate in the support group. The respondents gave a variety of answers that fell into two general areas: (a) need for stress reduction, and (b) desire to connect with others in the same situation. The need for stress reduction was reflected in several women's comments. One woman was experiencing several stressors when she received the solicitation e-mail, such as the recent death of a parent, marital stress, and a recent relocation. She was over an hour from her previous location where she had been receiving counseling, so the announcement about the support group was very timely. "It was a lot of reintegration issues for me It was like an answer." Another woman indicated that she was looking for some tools to work with to help her with her reintegration, "some tools to work with ... to help me with my reintegration, which I had a tough time with." The desire to connect with others was expressed in a variety of ways. In general, women reported that they wanted to know if their experiences with the reintegration process were similar to other women who had also been deployed. For example, one woman noted that after returning home, she wanted to go back. She was looking for "a sense of normalcy as far as, you know, feelings." She added, "My husband doesn't understand, because he's a man." The desire to connect with other women was also reflected in one woman's desire to provide feedback to other women. She said, "I know how difficult it was coming home from Iraq and just feeling like a lot of different things. I didn't know where to turn a lot of the time..." so she wanted to be able to provide support to other women in the same situation.

What They Got Out of the Group. One of the biggest benefits of participating in the group was (a) stress management skills, as reflected in this comment: "I just looked at some of the things they were talking about and um, try to apply it to everyday life, and now it seems that I don't get as stressed out as I used to." Another participant indicated that she was able to get "different ideas about how to cope with things from, like, a lot of different standpoints." Another participant spoke specifically about the benefits of the stress management techniques that were taught and her ability to use them when she experienced stressful experiences after the group: "My breathing, I did my breathing." In addition to tools that helped women improve their coping and stress management skills, women also reported benefitting from the group as a (b) venue for sharing. The group provided an opportunity for women to share their experiences with others who were able to understand their struggles, regardless of their backgrounds. As said by one woman, "it didn't matter honestly, you know, what branch we were or what status we were. We all pretty much had the same experiences." Another said, "it helped me to see, you know, quite a few things, like, that I wasn't the only one feeling this way." Even though women's individual experiences varied, there was a commonality among them and the group provided them with the opportunity to experience that universality. As said by one group member, "People don't know you, but you all share experiences. Yes. I share the same, well we all have something in common."

Recommendations. We were interested in what recommendations the women had for a group like this one. These recommendations addressed the content of the sessions and the technology used to host the support group. The first sub-theme was (a) improving technical issues. Some women had connection difficulties that resulted in a delay in them joining the group. In one instance, technical difficulties prevented one woman from participating in the entire session. "Of the four sessions, I had technical problems with two of them." Another woman commented that "sometimes you could see people but couldn't hear them." The opposite was also true. One woman was unable to see anyone in the group, although we were able to see her. A second sub-theme was related to the timing of the group. This referred to the duration of

the sessions, the number of sessions, and the best time to offer such a group. For women who commented on the number and duration of sessions, they recommended more sessions for a longer time. One woman commented, “I think it should be a little bit longer, like, some time for set-up, because it seemed like once we got going the hour just wasn’t enough even though the group was small.” The recommendations for when this group should be available to women after returning from their deployments varied from 3 to 5 months after returning, to over a year. One woman said, “I really recommend giving them a year, so that they can get and go through, you know, go through the process with a counselor.” Another woman said, “I wouldn’t say sooner than six months... to let people kind of re-adjust.” She continued, “Well, the reason I said wait at least six months – people go through so much when they back.” A third sub-theme was suggestions for content. One woman specifically recommended more information be provided about mental health and illness, and on suicide. The psycho-educational nature of the group, which focused on providing information and not on probing or directing the women in a particular direction was appreciated by at least one member who stated, “They touched on everything we wanted addressed and they didn’t try to pry into... they didn’t try to force us to talk about things that we didn’t want to talk about. So that was, that was really good.”

The final theme was other resources that the women used in addition to the psycho-educational group. Responses were varied; women reported participating in various programs at the VA, individual mental health counseling in the community, and receiving support from their church or religious community. This additional assistance was sought before, during, or after the psycho-educational group.

Table 1. Group Evaluation Question

	N	Mean	Std. Dev.
When I first heard about this group, I was very interested in joining.	7	4.86	.38
During my initial screening appointment, the group facilitator(s) helped me establish specific goals for group.	7	4.43	.79
The group screening meeting helped me to understand what the group was about and helped me to prepare to get the most out of the group.	7	4.29	.49
The group facilitator(s) established clear expectations for participation in the group (e.g., attendance, confidentiality, group rules).	7	4.71	.49
My participation in the group helped me to feel better about myself.	7	4.00	1.00
I felt connected to the facilitators of the group.	7	4.71	.49
This group helped me to feel connected to other women soldiers who are facing similar challenges as I am.	7	4.86	.38
The group facilitator(s) expressed genuine care for and interest in helping me.	7	4.86	.38
The group helped me improve my ability to communicate and interact with others.	7	4.00	1.00
At the end of group, my overall well-being has improved.	7	4.00	1.00
Overall, I am satisfied with the quality of my group experience.	7	4.43	.55
I would recommend this group or a similar group to a friend.	7	4.86	.38

CONCLUSIONS

Female members of the National Guard have personal behavioral health needs as they reintegrate. Family needs are also a critical part of the reintegration experience. Both individual and family should be addressed when female members of the military seek help from nurses, counselors, and other health professionals. Future research is needed to fully appreciate the role of gender in reintegration. Despite efforts by the military and the Veteran's Administration, many in this population have unmet behavioral health needs that are a direct and indirect result of deployment.

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Maung, J, Nilsson, JE, Berkel, LA, & Kelly, PJ, (under review). Women in the National Guard: Coping and barriers to care. *Journal of Counseling and Development*.

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APPENDIX 1

Maung, J, Nilsson, JE, Berkel, LA, & Kelly, PJ, (under review). Women in the National Guard: Coping and barriers to care. *Journal of Counselling and Development*.

Women in the National Guard: Coping and Barriers to Care

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Abstract

This study interviewed 42 women from the National Guard about their experiences coping during reintegration into civilian life. Data was analyzed using techniques of conventional content analysis. The first theme that emerged regarded barriers to seeking and accessing care (institutional barriers, personal barriers, and stigma). The second theme, coping strategies, consisted of three categories (seeking or gaining professional help, seeking social support, and religion/spirituality). Implications for clinical work with returning female soldiers are discussed.

Key Words: reintegration, military, national guard, barriers to care, coping

The National Guard and Reserves represent essential components of the United States armed forces that constitute nearly half of our military strength (Office of the Deputy under Secretary of Defense [ODUS], 2011). Women constitute about 18% of this branch, a portion that has steadily increased in the last decade (ODUS, 2011). Since the nation's recent wars in Iraq and Afghanistan, members, including women, of the National Guard and Reserves have been deployed to combat zones at rates higher than ever before in history (Polusny et al., 2009).

Deployment stressors often compound with the adjustment challenges that women face after returning to their respective families and communities. Compared to active duty military, members of the National Guard and Reserves tend to be older and receive less overall military training (Boyd, Bradshaw, & Robinson, 2013), and thus may be less prepared to effectively deal with family and civilian life separation (Kline et al., 2010; Lapp et al., 2010). Family primary caregiver responsibilities and interpersonal stressors are factors more strongly correlated with mental health for female soldiers, as compared to their male counterparts (Vogt, Pless, King, & King, 2005).

National Guard and Reserve families tend to have, compared to families of active service members, less access to and awareness of military resources that can provide assistance in the reintegration process, the “return home and reunion with family and community” (Doyle & Paterson, 2005, p. 361; Laser & Stephens, 2010). They may also be isolated from the support of military networks and experience greater financial hardships due to their prominent civilian roles. Although there is a significant amount of research that has investigated barriers to healthcare for male veterans (Yano et al., 2010), the literature currently lacks an analysis of how service women in the National Guard cope with their stressors or utilize resources during the reintegration process.

With the implementation of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), female veterans had unprecedented opportunity to serve in combat zones (Department of Veterans Affairs [DVA], 2011). While previous legislation barred women from direct combat positions, female service members are now often enlisted in “combat support” jobs, including serving in transportation, civil affairs, and the military police, that place them at risk for combat related stressors that are linked to mental health issues (Boyd et al., 2013). In an

examination of 7,251 active duty soldiers, Maguen, Luxton, Skopp, and Maden (2012) reported that 31% of service women had been exposed to death, 9% had witnessed killing, 7% had suffered from injury in the war zone, and 4% had killed in war.

While combat-related stress is predominately represented in the current literature,, women in the armed forces also report a substantial amount of perceived threat that is reflective of their exposure to gender-based harassment, unwanted sexual attention, sexual coercion, and sexual assault (Kelly, Berkel, & Nilsson, 2014; Street & Stafford, 2004). Such experiences are widely associated with poorer physical health and mental health diagnoses, such as posttraumatic stress disorder (PTSD), anxiety disorders, and depression (Kimerling, Gima, Smith, Street & Frayne, 2007; Street, Vogt, & Dutra, 2009).

Post-Deployment Readjustment and Reintegration

The stressors of deployment inevitably affect the family unit, as active duty females may need to make arrangements in order to take extended leaves of absence from their civilian jobs and find care for their children; these transitions are later associated with financial strain and transitional difficulties (Lane, Hourani, Bray, & Williams, 2012). Though deployment per se does not necessarily lead to negative outcomes for all military families, research indicates that pre-deployment family stressors and mental health issues such as PTSD and depression can make coping that much more difficult for the returning soldier (Monson, Taft, & Fredman, 2009). Sayers (2011) suggested that spouses of deployed soldiers may have difficulty renegotiating parental roles or reestablishing intimacy upon reunification, and may have difficulty fulfilling their former traditionally female roles and responsibilities, such as housekeeping and caretaking (Suter, Lamb, Marko & Tye-Williams, 2009).

According to a report by the ODUS (2011), 10% of members in the National Guard and Reserves are single parents as compared to 5% of Active Duty members. Single military mothers report lower levels of family functioning and more concern about leaving their children (Kelley, Herzog-Simmer, & Harris, 1994), and female veterans with children are more likely to report substantial declines in physical health after deployment and report psychological issues such as anxiety and depression (The Joint Economic Committee [JEC], 2007).

Barriers and Coping

Though the number of female veterans accessing Veterans Affairs (VA) healthcare has increased in recent years, many women still experience or perceive a number of barriers to accessing services. Studies have demonstrated that women veterans may not access VA services because of structural and institutional reasons, including the inconvenience of VA care, a knowledge gap regarding VA benefits, and perceptions of poor quality of care (Vogt et al., 2006; Washington, Yano, Simon & Sun, 2006). In 2009, 37% of all female veteran outpatients used some form of mental health service (DVA, 2011). Of those who utilized mental health services through the VA, 24% had only one visit whereas 18% had 12 or more visits in a single year (DVA, 2011). Studies regarding personal barriers to mental health care for veteran men suggest that concerns about public stigma and self-stigma, internalized negative beliefs regarding mental illness, significantly factor into service usage (Vogt, 2011). With women's expanding role in military service, there is a need for further research about whether or not female veterans face similar barriers regarding mental health assistance.

A dearth of research exists about the resources that female veterans use to cope with their deployment and reintegration stressors. Studies on male soldiers managing the process of reintegration have focused on the association between coping strategies, stress, and mental health

issues (Rodrigues & Renshaw, 2010; Demers (2011) reported that veterans negotiating between their military and civilian identities engage in self-isolation and alcohol usage as a maladaptive means of coping with feelings of internal disorientation. Veterans are found to be better able to cope with the reintegration process and their post-deployment stressors with the assistance of outside resources, such as tangible goods and services and emotional support (Tsai, Harpaz-Rotem, Pietrzak & Southwick, 2012)

Research by Gutierrez et al. (2013) suggested that veteran women exhibit maladaptive coping in the form of emotional numbing, substance abuse, thoughts about engaging in violence, and reckless behavior during their transition back into civilian life. One qualitative study conducted by Mattocks et al. (2012) demonstrated that women dealing with combat and military sexual trauma used a variety of coping strategies for dealing with their sources of stress. Most notably, women engaged in behavioral approach (i.e., using alternative behaviors to actively manage their stress), behavioral avoidant (i.e., replacing stress with maladaptive and harmful behaviors), and cognitive avoidant (i.e., isolation) coping strategies.

The goal of this study was to explore the ways that veteran women cope in their reintegration into civilian life. Although there is an increasing amount of research on the stressors endured by female veterans, the literature remains limited about how they vary in their post-deployment reintegration experiences. Furthermore, current research lacks an investigation of how different institutional and personal barriers may hinder National Guard and Reserves women from accessing the services that they need to successfully reintegrate. This qualitative study was conducted to document the unique experiences of returning female soldiers, by interviewing 42 women from the National Guard about their experiences coping and accessing support during the reintegration process. The overarching research question of this study was

“How do women in the National Guard and Reserves who have been deployed to combat zones cope with issues of reintegration?”

Methods

This study is a subset of a larger qualitative study examining the reintegration process of 42 women in the National Guard and Reserves who had been deployed. The transcript data was initially analyzed using a modified version of Consensual Qualitative Research (CQR) methodology, which is an inductive and constructivist approach that emphasizes team consensus (Hill et al., 2005). Given the large number of participants in this study, this modified version of CQR was not used in the secondary analysis of the present data. The secondary analysis was conducted by the first author of this manuscript, who utilized techniques of conventional content analysis and the analytical procedures outlined by Marshall and Rossman (1999). This type of analysis is appropriate with a study that aims to describe a phenomenon without using preconceived explanations of the data (Hsieh & Shannon, 2005).

Participants

Permission was obtained from each state’s National Guard unit to recruit women via announcements posted on units’ Facebook pages, flyers posted at unit locations, and general word of mouth. Participants were eligible to take part if they identified as a current or former female soldiers in the National Guard and were deployed at least once. Additional participants were recruited through snowball sampling, which is appropriate to use to “reach out to populations that are difficult to identify and contact, either because they are traditionally underserved, vulnerable or must fit within a set of narrowly defined characteristics” (Sadler, Lee, Lim, & Fullerton, 2010, p. 369). The 42 participants were from National Guard Units across the Midwest, including Iowa, Kansas, Missouri, Nebraska, and North Dakota. Their ages ranged

from 23 to 58 ($M = 35$ years, $SD = 10$ years). The majority, 72%, had been deployed once, 28% had been deployed twice, and 7% had been deployed three times. The most common deployment destination was Iraq (28 soldiers) and Afghanistan (12 soldiers) at least once. Deployments lasted from three weeks to 16 months ($M = 10$ months, $SD = 3.36$ months). At the time of the interview, 17 (40%) soldiers were married, 14 (32%) were divorced, and the remainder were single, separated, or engaged. The women reported a variety of jobs during their deployment, including administrative assistant, medic, flight technician, and personal security.

Interview Protocol and Procedures

Interview questions were developed based on the Family Resiliency Model, which was adapted from Hill's (1949) work regarding war-induced separation and reunion within military families. The Family Resiliency Model looks at factors pertinent to a family's ability to withstand stress and cope with stressors (McCubbin & McCubbin, 1993). Specifically, the participants were asked about their experiences of reintegration, family functioning, stressors, support networks, faith/spirituality, and use of resources before and after deployment.

The university's Institutional Review Board and the Ethics Panel of the Office of Congressionally Directed Medical Research approved the study's protocol and a consent form that was read to each woman prior to the interview. Interviews were conducted via phone and later transcribed verbatim.

Role of the Researchers

All of the researchers involved in this study were affiliated with institutes of higher education. Three faculty members from the School of Nursing and the Division of Counseling and Educational Psychology of a mid-sized Midwestern University conducted the interviews with the participants. The original phase of data analysis utilized a team of research members

that consisted of eight students and faculty members in a counseling psychology program. Prior to reviewing the transcripts, the faculty members and students discussed their biases and beliefs regarding women in the military. While several of the team members were able to identify family members who had served in the military, none of the team members had any military experience themselves. Several team members reported feeling like “outsiders” to the military culture. While members expressed admiration for female soldiers willing to sacrifice for their country, they also communicated wonder about such women’s decision to join the National Guard, particularly when there were young children in the home.

Data Analysis

As stated previously, the data was first analyzed using a modified version of CQR; Hill et al., 2005. The research team trainings initially involved readings of the Hill et al. manual (1997) and revised manuscript (2007), which delineated CQR, its steps, and its theoretical framework. Following a general discussion about CQR, the researchers practiced applying predetermined codes on two manuscripts that were distributed to the whole team. After completion of the training, group members worked in teams of two to code each interview. Continued revision of the codes occurred within the larger context of the research team until a final list of domains and categories was identified, as consistent with the CQR method. The female faculty member from the School of Nursing, who participated in the interview process of the study, served as an auditor to review the list and make recommendations for revisions. The final list of codes was entered and organized into HyperResearch, a qualitative data program (Dupuis, 1994).

As stated, the secondary analysis (present study) followed the techniques of conventional content analysis and the analytical procedures outlined by Marshall and Rossman (1999). As the first author was already immersed in the data, themes were grouped and reorganized based on

emergent relationships and broad themes. In the final steps of analysis, as predetermined by Marshall and Rossman (1999), categories and subcategories were developed by looking at repeating patterns of language and ideas. This initial list of categories and subcategories was produced after thoroughly examining the data and testing it for alternative explanations and patterns. Throughout the coding process, memos and thoughts were documented as they occurred in order to move the data to a more nuanced level of understanding. Next, one of the faculty members of the research team then reviewed the themes and categories and suggested changes.

After a final coding list was produced, the analysis was audited by a counseling psychologist familiar with qualitative research methodologies. He reviewed the assigned codes and findings to provide feedback in order to ensure the credibility and trustworthiness of the findings. Categories and sub categories were modified as suggested to produce the final results.

Results

Results revealed two overarching themes. The first theme concerned the different barriers that women experienced while pursuing care and support. This theme was divided into three categories: (a) Institutional barriers to professional organizations; (b) Personal barriers; and, (c) Stigma. All of these categories contained several subcategories. The second theme, coping strategies, consisted of three categories including: (a) Seeking or gaining professional help; (b) Seeking social support; and, (c) Religion/spirituality (see Table 1 for more details). Pseudonyms have been used to identify all participants.

Institutional Barriers to Professional Organizations

This category revolved around barriers associated with professional organizations that prevented participants from fully seeking care. The three subcategories were: (a) Lack of

awareness of available resources; (b) Distrust of professional services; and, (c) Economic barriers.

Lack of awareness of available resources. A barrier to obtain services was a lack of awareness of available resources for reintegration. Some participants communicated feeling overwhelmed having to navigate through the resources provided by the VA to find programs that could specifically meet their needs. Maria, who had deployed twice to Iraq, expressed missing out on an opportunity to meet other women veterans because of the activity's limited publicity: "I didn't get to attend it because of course I didn't find out until halfway through the first day through the events. I don't know where it was publicized." Another participant, Kathy, age 23, expressed that spouses and supporters of former soldiers need to be better informed about mental health concerns and the different types of resources available for veterans:

Some of my other friends off of deployment, their spouses didn't know what to look for. If their husband or their wife just went off the deep end one day, they didn't know what to do. A lot of them were unfamiliar with PTSD and how to handle that situation. If spouses and supporters were more informed of the mental health resources [...] that would have helped.

Distrust of professional services. Several participants described their distrust of professional services in the VA as being a barrier to pursuing mental and physical health services. Such distrust seemed to stem from an assumption that professionals would be skeptical of their deployment experiences. This was particularly distressing given that certain events during deployment may have precipitated physical or mental concerns that required medical care. Michelle, age 37, described it in this manner:

Because honestly when I go to the VA they think, for the most part it's almost like you really have to sell yourself and say, "I was really there, I really did these things, I really wasn't just a clerk or a typist, you know?" So who wants to do that? I don't like going in and having to prove myself.

Jessica, age 50, mentioned feeling concerned that her mental health care would not remain confidential if she received services through the military system. She spoke about wanting to see a psychologist on base but feeling wary that other military personnel might see her seeking help: "Part of it is because we are the Air Force and the National Guard, we're very small and I was somewhat afraid to look out for assistance. Because it was like, who's going to over hear me talking?" Other participants did not seek mental health counseling because of doubt that a professional without combat zone exposure could empathize with their experiences.

Economic barriers. For some of this study's participants, the stress of finances took precedence over counseling services. Rebecca, age 40, described how money issues impacted her reintegration experience: "Our finances were very stressful. We went from me having deployment pay to me having no pay." Rita, age 41, had to deal with the strain of her ailing husband's medical bills and relayed that seeking therapy seemed unfathomable: "I am afraid that counseling is going to make us actually bankrupt [...] I don't want to seek treatment at this point, because I'm afraid that I will start bouncing checks and not be able to pay my mortgage. That is a big stressor."

Personal Barriers

This category revolved around internal and personal barriers. Three subcategories were detected: (a) Doubt that civilians will understand; (b) Behavioral avoidance and withdrawal; and (c) Substance use.

Doubt that civilians will understand. Although participants could identify supportive friends in their community, many stated that it was difficult to talk to them about their experiences in the military. Participants, including Isabelle, age 58, shared their difficulties relating to civilians: “I don’t expect people to understand what I’m going through, especially if you’ve never experienced a deployment to a combat zone. You’re not going to understand it.”. Rachel, who had been deployed once to Afghanistan, described the difficulty she found relating to friends from her small community:

In a small community like mine, they just know that I disappear for three months, six months, a year at a time or something and that we’re gone. They know I’m in the military, but they really don’t know what I do, so it’s kind of weird being a soccer mom, and then being in the military. I don’t think people understand. I don’t think most Americans have a clue.

Behavioral avoidance and withdrawal. Many women described reintegration difficulties that resulted in withdrawing from others. For these participants, such coping tactics hindered them from fully seeking out resources for their various needs. Based on the data, it seemed that this type of coping resulted from mental health problems like depression. Maria, who had deployed once, described how her lack of sleep and avoidance behaviors prevented her from attending work: “I called my supervisor and told him there is nothing wrong with me physically, but I’ve been up for hours and I just can’t go out of the house. I’d go downstairs and I would come back upstairs and just sit in my bed.” Natalie, who had deployed twice, described her reluctance to meet her mother, who insisted that she come over to socialize:

I don't think she really understood my need to isolate myself for a little bit until I got my feet back underneath me and started being comfortable being back in the civilian world again. I needed to get myself out of the combat mentality and back into regular life.

Ashley, age 34, openly described the obsession she developed cleaning her house and tending to her garden. For this participant, such activities were better performed in isolation, to the point that neighbors and roommates became concerned with her well-being and had to escort her away from the garden. The same soldier openly described experiences trying to manage her anger and significant difficulties relating to others.

Substance use. For a few participants, alcohol became the primary form of dealing with various stressors and reintegration difficulty. Ashley described how her overwhelming feelings of anger and emotional pain led her to alcohol: "I hated school, I hated every volunteer position that I was holding, I hated people in general, I just wanted to go home, have a drink, and shut it all out. I was nasty to my family, I was nasty to my friends and I was just so tired and so emotionally drained." Leslie, age 27, described her use of alcohol even as she was attempting to receive help from professionals: "I had to reach out to counselors a few times. I'll be quite frank, I also reached out to a bottle a few times."

Stigma

Many participants referenced the idea that reaching out for help or treatment could be associated with shame, weakness, and other negative feelings. These social beliefs, herein labeled as forms of stigma, seemed to revolve around three subcategories: (a) Gender; (b) Identity as a soldier; and (c) Mental health.

Gender. Several female service members mentioned the extra burden of being a female, or the need to be perceived as "strong" relative to their male counterparts. Given their gender,

several participants perceived that their colleagues might attribute their usage of therapy or psychological services as shortcomings, perhaps making them seem less capable of being a competent soldier. Jessica described taking on a military sense of “toughness” to ensure equal comparison with her male counterparts: “Well because you know you’re a female in the military, you know, you don’t want men to, and I’m not saying that they do, but you want to be on an even level with them.” Michelle described how concerns about being characterized as a “weak” female dissuaded her from seeking therapy from the military:

But, I think because of my gender and because of my position and that I prefer to keep things on the civilian side, so if I were going to talk to a therapist, I would not go talk to a military therapist. [...] And it probably has more to do with my gender to be honest.

Because I have a fear of being labeled ‘Oh, she’s a girl she had to go get therapy of course she had to talk to someone, she’s weaker, you know?’

Identity as a soldier. A large portion of the veteran women sampled in this study stated that they never sought help or care for their mental health issues or concerns because of their need to be perceived as capable soldiers. According to one participant who had deployed to Iraq, to be a soldier means to “just sit up and drive on,” without relying on others for support. Some participants mentioned that it is easy to forget how to rely on others after such an intensive time depending on one’s self during deployment. Taylor, who had deployed once to Iraq, stated that the need to be portrayed as a strong soldier meant keeping her superiors uninformed about her difficulties: “My sergeants never knew anything. I never said anything to my lieutenant. I never said anything to any of my sergeants. [...] And I know that sounds very selfish, but I just, I wouldn’t. I wouldn’t want them to think of me that way-that I was struggling.” For some women veterans, being a leader meant conveying an ability to self-withstand stress in order to be an

example of strength for their soldiers. Michelle stated it in this way: “I know and it’s horrible and I think it’s a stigma that comes with being a leader. As a leader, I never wanted to show my soldiers that I was weak. [...] But, there’s just that stigma that I’m the one that’s supposed to carry the ball...”

Mental health. Many participants communicated that there is a culture of stigma associated with mental health issues in the military. There was a consensus that individuals are not likely to be open about the mental health concerns, seek care, or be able to receive care for fear of being negatively labeled. As Kathy explained it: “nobody wants to be the crazy guy [...] I had a huge issue of swallowing that pill and being able to say yes I have PTSD, I have a problem, I need help.” Morgan, who deployed twice, mentioned that the stigma regarding mental health prevented her from accessing resources: “There’s probably opportunities for even myself to have utilize some of these resources early on but I didn’t. Because I couldn’t see it myself and I still believe that there is a stigma to seeking mental health.”

Coping Strategies

The coping strategies theme was defined as behavioral approach strategies that participants used to manage their post-deployment and/or readjustment problems: (a) Seeking or gaining professional help; (b) Seeking social support; (c) Utilizing routine activities; and (d) Utilizing aspects of religion/spirituality.

Seeking or gaining professional help. A large number of interviewees stated that they sought mental health counseling for themselves or their family members in order to cope with their various reintegration issues. While some participants were comfortable finding counselors through the VA, others purposefully looked for civilian counselors. Several women spoke about utilizing counseling in order to help their children cope with various issues, such as an

impending divorce, low self-esteem, and behavioral problems. Dawn, who had deployed once to Iraq, spoke about seeking counseling for her son who was working through separation issues: “I think I adapted to him [my son] pretty well however we did have to seek counseling because he had anxiety issues when I came home. He wouldn’t let me leave his sight because he thought that I was going to leave him again.”

Participants who had sought individual counseling cited a number of reasons for pursuing such services, including general transition issues, past family concerns, and current child-parent relational problems. Many veterans stated that they found therapy helpful because there was an individual that consistently listened to them and provided guidance and support through various life adversities. For Heather who had deployed once to Iraq, counseling became a helpful resource after recognizing that she could not cope with her ongoing anger problems: “Issues wise, I just think really that my patience has gone down. I was not as easygoing as I was before I left and just angry and I couldn’t really tell you what I was angry about [...] luckily after time and with counseling that resolved...”

Several participants also described ongoing issues with depression, PTSD, and anxiety. Some women pursued medication in conjunction with therapy in order to treat their mental health concerns. While most women found this combination helpful for their adjustment, one participant stated that she weaned herself off of her anxiety and anti-depression medication because she wanted to find other ways to cope with her mental health issues. Similarly, a few participants were concerned about becoming dependent on medication to deal with their issues and described counseling as a helpful and effective alternative.

Seeking social support. This category included instances where female service women

actively reached out to significant others, family members, friends, other service members or support groups for instrumental or emotional support. Several women stated that their partners, a significant number of whom were formerly or currently in the military, demonstrated support by giving them time and space so that they could gradually ease back into their roles as mothers, wives, and civilians. Participants also relayed that they felt less stressed during the reintegration process when they were confident that their partner could handle household tasks and care for their children. Cristina stated that intentionally spending alone time with her spouse helped them to emotionally reconnect and gave her the stability she needed to comfortably readjust.

Many participants reported that their family members had initial difficulty accepting their roles in the military and were worried about their safety. Despite not always understanding their loved one's decision to enroll in military service, family members provided assistance by offering child care or financial aid. One veteran's extended relatives were instrumental in helping her to understand and deal with her children's behavioral difficulties. Tiffany, a single parent, stated that her brothers took care of her children when she was deployed for months at a time. A few women stated that it was a family member that ultimately urged them to seek out mental health services for PTSD and depression symptoms. Kathy described how a sibling helped her to seek services for her mental health issues: "My younger sister [...] at first she didn't want to say anything to me and thought I would just calm down eventually. But she noticed what she thought was problems with PTSD. She asked me to seek some help." Other participants depended on their older children to organize household tasks, grocery shop, drive, or take care of younger siblings.

Many participants stated that it was easier for them to reach out to others who had military experiences similar. They felt supported by fellow colleagues from the military because

they could understand and appreciate the unique experiences encountered during deployment, as relayed by Michelle: “I found myself clinging more to those who were there and experienced that with me than those that never did. They just never understood why it was okay for me to go there and do what I had to do.” Other participants positively described the comradery of their unit and stated that they became successful in their professional careers because of the help of fellow colleagues. Ashley recounted how veterans at her community college banded together to provide academic support for one another. Lastly, a few women described how attending support groups gave them an outlet to share different stories, frustrations, and setbacks. Isabelle was fortunate enough to find such a support group and relayed that sharing about her deployment times with other female soldiers provided a “kind of a cathartic type of experience” that felt easier than speaking to a therapist.

Utilizing routine activities. Other than depending on their social networks for instrumental and emotional support, some women from this group conveyed that they were better able to reintegrate by focusing their attention on normal household and work tasks. Women such as Tina suggested that they were able to cope by getting into a structured routine: “I think getting back into your work place and getting back to your life structure, the way it was before you went, is important to get going. It doesn’t leave you a lot of time to sit around and think.” Cristal, who had deployed once to Afghanistan, stated that going back to her former workplace helped her to better manage feelings of depression: “You sit around and you get depressed. And so, I went back to work [full-time] less than 30 days after I got home..”

Utilizing aspects of religion/spirituality. Several participants stated that they drew upon their spirituality or religion to actively cope with their reintegration stressors. Michelle used her bible study as a place to seek support, even if she did not feel entirely capable of opening up:

“It was an all women’s bible study, a little small group and I felt like I could talk about things, I didn’t really open up too much but was really helpful for me, I needed a support group like that.”

Maria described depending on her relationship with God to get her through times of great emotional difficulty:

If I had not had some relationship with a higher power, knowing that somebody else is in charge of my life, I probably would be a statistic [...] If I can just keep trying to wake up, God is going to take care of me. Right now, this is the darkest I’ve ever been.

Discussion

The purpose of this study was to offer a perspective on the types of coping processes that may occur when female soldiers from the National Guard and Reserves return from deployment and attempt to reintegrate into their family and civilian lives. The investigation additionally highlights the significant barriers experienced by female soldiers seeking help and support from professional services. Notably, participants relayed a number of institutional barriers, including a sense of distrust of authorities within the VA system. Some women shared stressful experiences about dealing with VA personnel that were skeptical of their deployment duties and subsequent need for services. Similar to previous findings on male service members (Wright et al., 2009; Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004), women’s fears about privacy, unawareness about available resources, and financial concerns also kept them from seeking services through the VA.

Based on participant interviews, one of the most significant impediments for female veterans was the stigma associated with reaching out for help or treatment. This subject is prevalent within existing literature on the mental health seeking practices of male veterans (Kim, Britt, Klocko, Riviere, & Adler, 2011). Further analysis of this category revealed that instances of stigma were generally associated with three sub-categories that included gender, being a

soldier, and mental health. Consistent with the stigma associated with mental health issues, some women were fearful that others would interpret their usage of psychological services as a weakness that characterized them as less than capable service members. This pressure to “act tough” seemed more pronounced for certain female soldiers who identified as leaders for their units. Female soldiers may be reluctant to seek services because of prevalent types of beliefs regarding mental illness and mental health care (Kim et al., 2011). The results from this study emphasize the notion that soldiers with intersecting identities as women and leaders seem to endure additional pressures to “act tough.”

Some women coped with reintegration by isolating themselves, despite the supportive insistence of loved ones. A few women highlighted a need to withdraw from their social connections because their initial reintegration into civilian life felt too overwhelming. This is in contrast to the vast majority of women who stated that their most effective method of coping was to rely on members of their social network. Unlike previous research on alcohol use as a negative coping strategy of male soldiers (Wilk et al., 2010), only a few participants in this study mentioned using alcohol to cope their stressors or negative emotions. However, these results may have been attributable to participants under-reporting their usage. Research suggests that both avoidant and approach reactions to trauma can reduce anxiety and stress under certain circumstances, though certain escape-avoidance tactics (including behaviors such as drug or alcohol abuse), almost always lead to negative outcomes (Folkman & Moskowitz, 2004).

Women described coping with their deployment and reintegration stressors by utilizing strategies that were characterized as behavioral approach forms of coping. Behavioral approaches included measures to either talk to others about their stressors, utilize aspects of religion/spirituality, or fully immerse one’s self in work or family responsibilities. The majority

of participants coped with their stressors by reaching out to members of their preexisting social circles or military network. Women also used religious groups and institutions, where they could share their experiences or seek help for emotionally difficult situations. Notably, some participants in this study commented that they sought counseling and medical care for themselves or their family members because of ongoing issues with anger, PTSD, depression, and relationship concerns. Generally, counseling services were perceived as quite effective for those who felt unable to share about their experiences with loved ones. Lastly, a few women seemed better able to cope with their various stressors by getting back to work and focusing on normal household duties, which allowed them to feel a sense of stability and active involvement.

Overall, the findings from this study suggest a number of practical implications that can improve the overall quality and experience of reintegration for female service personnel. In accordance with the literature, many service members may feel reluctant to seek services because of the stigma associated with mental health issues. This sense of stigma seems to be pronounced for female service members who feel that their resolve is often times questioned because of their gender identity. Female soldiers may perceive additional pressure to “toughen up” and perhaps disregard their own need for services or seek services elsewhere.

Further research might investigate to what degree female soldiers hold internalized stigma regarding mental health issues and how future programs can address such barriers to care. Currently, there are a number of initiatives in place that address the issue of mental health stigma in the military, especially as it pertains to mental health service utilization (Acosta et al., 2014). Considering the growing number of females entering service, it is imperative that such initiatives consider the unique experiences of women veterans who may feel compounded pressure to “act tough”. As suggested in previous literature (Hoge et al., 2004), this barrier

might be circumvented by direct changes in mental health care delivery such that veterans are able to receive counseling and mental health services at primary care clinics.

Interestingly, some participants in this study stated that they also sought mental health services or assistance for their children who were experiencing various adjustment concerns. For these women, reintegration was not just an individual concern but a process that affected their entire family unit. In light of these needs, female soldiers would benefit from not only individualized services but also comprehensive counseling services tailored for their children, spouses, and extended family members. Previous research has demonstrated that soldiers seem to prefer family-based treatments to individual therapy (Khaylis, Polusny, Erbes, Gewirtz & Rath, 2011). This emphasizes the need for VA hospitals or community centers to additionally offer couples or family therapy for female soldiers returning from war.

In this study, social connections played a significant role in urging certain soldiers to pursue mental health care. Bearing this in mind, psychoeducation events and outreach should be broadened and include information relevant for the loved ones of female soldiers in the military. The participants who were in a support group or had ties to others in service stated that it was helpful to hear others' stories because this helped to normalize their experiences. However, it is evident that such social support may not be as readily available for soldiers who do not return to family members or come from smaller communities that have little knowledge about the National Guard. Women in such communities may have little sense that others know about their duties abroad and struggle to find a sense of belongingness. It seems that special attention and research needs to be directed towards female service members that return to rural communities and have lesser access to support groups or other military personnel. Additionally, women

service members who identify as single parents could benefit from further assistance for childcare, especially if they do not have the benefit of relying on extended family members.

Participants in this study represented a narrow group of formerly deployed females from the Midwest who likely had access to Facebook or other National Guard websites. A disadvantage of snowball sampling is that it may include an “over-representation of individuals with numerous social connections who share similar characteristics” (Sadler et. al, 2010, p. 370). We recommend that future researchers seek participants from other states or design studies that give a unique perspective on specific sub-groups of this population (i.e. female soldiers that identify as minorities or reside in rural areas). Additionally, this study focuses on a subset of data that comes from a larger study on female soldiers’ overall reintegration and deployment experiences. Due to this type of analysis, relevant contextual details or other significant themes may have been overlooked. Furthermore, the same researcher acted as an interviewer and auditor for this study. This may have introduced potential confounds given the researcher’s background knowledge and investment in the development of the study. Lastly, these interviews provide a cross-sectional snapshot of the experiences of female soldiers. It is unknown whether the experiences of some participants have significantly improved or worsened since the time of this study or if coping, due to contextual and individual factors, seems to change over time. Further studies should examine the longer term effects of deployment on coping and reintegration over time.

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Table 1.

Barriers to Care and Coping Strategies of Women from the National Guard

Theme 1: Barriers to Care

Institutional Barriers to professional organizations

- Lack of awareness
- Distrust of professional services
- Economic barriers

Personal Barriers

- Doubt that civilians will understand
- Behavioral avoidance and withdrawal
- Substance use

Stigma

- Gender
 - Identity as a soldier
 - Mental health
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Theme 2: Coping Strategies

Seeking or gaining professional help

Seeking social support

Utilizing routine activities

Utilizing aspects of religion/spirituality

APPENDIX 2

Kelly, PJ, Cheng, A., Berkel, LA. & Nilsson, JE. (in press). Perceptions of Individual and Family functioning among deployed female National Guard members. *Journal of Family Nursing*.

Journal of Family Nursing

Perceptions of Individual and Family Functioning among Deployed Female National Guard Members

Journal:	<i>Journal of Family Nursing</i>
Manuscript ID	JFN-2015-063.R2
Manuscript Type:	Research
Keywords:	Health Promotion < Family/Participant group, Quantitative < Research Methodology/Design, family functioning; women's health; military women; reintegration; National Guard

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ABSTRACT

Background: Females currently make up 15% of U.S. military service members. Minimal attention has been paid to families of female National Guard members who have been deployed and their subsequent reintegration challenges. **Methods:** This cross-sectional internet-based survey of female members of four National Guard units compared those who were and were not deployed. Instruments, guided by the variables of the Family Resilience Model, measured individual, family and deployment-related factors. Bivariate analysis and ordinal logistic regression were done to assess differences between the groups. **Results:** Of the 239 National Guard members surveyed, deployed women (n=164) had significantly higher levels of PTSD ($p < .001$) and lower coping skills ($p = .003$) than non-deployed women (n=75). Perceptions of overall family functioning were higher among deployed when compared to never deployed women. **Discussion:** Results indicate community interventions that focus on strengthening coping skills of female Guard Members would be useful for this population.

Key Words: female service members, deployment, family, reintegration, National Guard

Background

The extensive societal impact of second wave feminism has resulted in an increase in the number of women in the U.S. military, from 1.3% in the 1960s to the present 15%, with concomitant opportunities for training and career advancement (Institute for Women's Leadership, 2010). Fully 11% of the troops in units deployed to Iraq and Afghanistan have been women. A more recent change in military structure has been the dependence on National Guard units, largely as a result of cutbacks in Department of Defense budgets and the attacks of 9/11, which have moved these units from providing emergency response and disaster relief to becoming an integral part of the country's defense system (Renaud, 2005). The current deployment orders of National Guard units of six to nine months are longer than the few weeks traditionally served in the past (Booth, Segal & Bell, 2007). These units, from each of the states and territories, are made up of citizen-soldiers who train together for one weekend per month and two weeks of summer service.

Deployment to combat settings is a difficult experience for members of the military. In addition to uncomfortable physical conditions, dangerous environments, and the ever-present possibility of death or injury to self or colleagues, female troops are subjected to frequent harassment or sexual assault (Leardmann, Pietrucha, Magruder, Smith, Murdoch, Jacobson, et al., 2013). These conditions all contribute to the high occurrence of mental health problems experienced by many military members on return from deployment. U.S. military personnel engaged in recent deployments return with greater numbers of psychological rather than physical casualties, including posttraumatic stress disorder, depression and/or traumatic brain injury (Sammons & Batten, 2008). Over 300,000 returning military personnel have at least one of these conditions; while generally invisible to the casual observer, they result in social withdrawal,

irritability, decreased empathy and general psychological numbing (McFarland, 2009; Rand Corporation, 2008).

The return from deployment, a process known as reintegration, creates other difficulties for both service members and families. In addition to addressing the physical and mental health issues that may have resulted from the deployment, service members must confront the reality that part or all of their roles as parent and/or spouse have been filled by others, that relationships have shifted, and that families have continued to function in their absence ([REDACTED], 2014; Sheppard, Malatras & Israel, 2010). The Department of Defense has responded to the challenges of this coming-home process with a variety of programs and interventions, including Yellow Ribbon Programs, military family support groups and parent-child interaction therapy (http://www.benefits.va.gov/gibill/yellow_ribbon/yrp_list_2014.asp; <http://www.military.com/spouse/military-life/military-resources/military-support-groups-and-centers.html>; Hood & Eyberg, 2003). However, many of these programs have been minimally evaluated and access to evidence-based interventions for military families lags behind that of civilian world (Murphy & Fairbanks, 2013). The need is especially acute for community-dwelling families of National Guard members.

While military families in general are highly resilient, a reality is that National Guard service members, who lack experience with separation and deployment, may not share this resiliency (Booth, et al., 2007). The Department of Defense and Veteran’s Administration resources that support full-time Army, Navy, Air Force and Marine units through the stresses of reintegration, are not always available to Guard members, who may live far from military bases and supportive unit members (Murphy & Fairbank, 2013; Palmer, 2008). Department of Defense budgetary constraints mean that many National Guard members and their families will seek

access to community mental health services that may not always exist, be affordable or have military-informed providers who are aware of deployment/reintegration related issues (Link & Palinkas, 2013). Outside of traditional mental health service settings, which many military personnel are reluctant to access, services or support may be sought from non-military community clergy members and primary care or social service providers (Murphy & Fairbank, 2013).

A special gap in this literature is that limited distinction has been made between the impact of deployment on the families of female and male members of the military and the subsequent reintegration challenges of mothers, partners, and wives. Many studies assume that it is the husband/father who is returning, with minimal attention paid to gender-specific issues.

This inattention is especially evident for women in National Guard units, who return to communities, jobs and families that may have little understanding of the reason for the absence or the physical and emotional challenges of the experience. The goal of this study was to better understand the characteristics and family function of women who have chosen to serve in the

National Guard. We grounded our work in the framework of the *Resiliency Model of Family Stress*. Based on an examination of family stress and war-induced separation and reunion within families (McCubbin & McCubbin, 1993; Hill, 1949), the model identifies factors (variables) that influence a family's reaction to crisis and stress, and coping/actions taken to reduce demands. We integrated the concepts of the model with the results of an earlier qualitative phase of this study (██████ 2014), and the impact of deployment on these variables. Specifically, we hypothesized women's post-deployment individual and family vitality to be a result of:

- Prior experiences
- Deployment experiences

- Personal coping strategies
- Family functioning

The research question to be answered was, “What are the perceptions of women in the National Guard about the effects of deployment on their families?”

METHODS

We conducted an internet-based, cross-sectional survey in which participants were recruited from an informational email sent to women in the National Guard units of four mid-western states. Notices about the study were also placed on the websites and Facebook pages of the units. To answer our research questions, female military members who had and had not been deployed were invited to participate. Permission to conduct the study was received from the University Institutional Review Board and from the Office of Congressionally-Directed Medical Research’s Ethics Board.

Sample/Population

All female service members in National Guard units from four Midwestern states were send email invitations to participate in the survey. We calculated that 242 subjects were needed for the logistic regression analysis with odds ratio of 1.5 (Faul, Erdfelder, Buchner & Lang, 2009). This sample size calculation for two-tailed statistical tests was based on a power of 0.8, with a moderate effect size (0.3), and alpha equals 0.05, and was determined to be adequate to answer the primary research questions.

Instruments

Instrument selection to measure individual, family and deployment-related factors was guided by the concepts of the Family Resilience Model and by the results of qualitative

interviews specific to this topic ([REDACTED] 2014). Basic *demographics* were collected for all participants, with 16 deployment-specific items for those who had deployed.

Individual level variables were assessed with the following instruments:

- *Depression* was assessed with the Major Depression Inventory (MDI), a self-report mood questionnaire developed by the World Health Organization's Collaborating Center in Mental Health (<http://psychology-tools.com/major-depression-inventory/>). Its 12 items ask how frequently one has been feeling each over the last 2 weeks (e.g., "Have you felt low in spirits or sad?"), with six choices ranging from 0 (at no time) to 5 (all the time). Higher scores indicate greater depression. The MDI been assessed to have good reliability and validity (Cronbach's alpha = 0.90) (Olsen, Jensen, Noerholm, Martiny & Bech, 2003).
- The presence of *symptoms of post-traumatic stress syndrome* (PTSD) was assessed with PTSD Checklist-Civilian Version Assessment (Weathers, Litz, Huska & Keane, 1994). Items are scored based on a 5-point rating scale (1 = not at all; 5 = extremely). This 17-item survey has good test-retest reliability (0.66) and good validity (Cronbach's alpha = 0.94) (Conybeare, Behar, Solomon, Newman & Borkovec, 2012). Higher scores indicated more symptoms.
- *Coping* was assessed with the 13-item checklist of commonly accepted positive (regular physical exercise, balanced) and negative (use of chemical substance to reduce anxiety) practices to maintain optimal mental health (DHHS, 1981). Items were asked in a yes - no format (e.g., "I have a supportive family around me," "I practice time management techniques daily"). Items were asked in a yes - no format (e.g., "I have a supportive family around me," "I practice time management techniques daily") and summed to create

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an interval score with possible range of 0-13; higher scores indicated better coping practices. Crombach's alpha for this sample was 0.664.

Family level variables measured were:

- *Family hardiness* or overall family health was assessed with the Family Hardiness Index (McCubbin, Thompson & McCubbin, 1987). This twenty-item instrument (examples include, “In our family, we have a sense of being strong, even when we face big problems” and “ In our family, we strive together and help each other, no matter what”) used a four-point response scale (false, mostly false, mostly true and true). The instrument has good overall internal reliability, with Cronbach’s alpha of 0.92 and test-retest reliability of 0.86 (McCubbin, Thompson & McCubbin, 1987). Higher scores indicated greater hardiness.
- *Family functioning* was assessed with the five-item Family APGAR. The instrument included the realms of adaptability (“I am satisfied that I can turn to my family for help when something is troubling me”); partnership (“I am satisfied with the way my family talks things over with me and shares problems with me”); growth (“I am satisfied that my family accepts and supports my wishes to take on new activities or directions”); affection (“I am satisfied with the way my family expresses affection and responds to my emotions, such as anger, sorrow, or love”); and resolve (“I am satisfied with the way my family and I share time together”) (Smilkstein, 1978). Three responses are possible: 0=“hardly ever”, 1= “some of the time” and 2=“almost always”. Possible scores range from 0 to 10; higher score indicates a greater satisfaction with family function; scores of 8-10 are considered to be highly functional. Cronbach’s alpha values reported across studies using the Family APGAR have ranged from .80 to .85 (Smilkstein, 1978). The instrument is considered to

be a valid and reliable measurement of family vitality (Mengel, 1987; Smilkstein, Ashworth & Montano, 1982).

- *Parenting strain* was assessed with [the relevant scale of](#) from [Pierce, Vinokur](#) and [Buck \(1998\)](#) for assessment of war-induced maternal separation two years after return. Items asked [about](#) the level of difficulty providing for children's daily care, their financial, physical, emotional, social and educational needs, and the extent of conflict between children and work responsibilities. Responses were made on a five-point Likert scale ranging from 0="not difficult at all" to 5="extremely difficult", with higher scores indicating greater strain. Cronbach's alpha for the scale is 0.77 (Kandel, [Davies & Raveis](#), 1985).

Statistical Analyses:

Demographic variables were calculated. To answer the research question, "What is the effect of deployment on women in the Nation Guard and their families?" we compared women who had and had not been deployed, with dependent variables of PTSD, depression, family functioning, family hardiness, [and](#) parenting strain while accounting for significant demographic variables as covariates. Due to the violation of normality assumption on the outcome variables, instead of using independent t-tests, ordinal logistic regression models were conducted to test for the effect of deployment; this non-parametric method can test main effect, account for covariates and address the violation of normality assumption at the same time (Zumbo, 1999). All statistical analyses were conducted using statistical software SAS version 9.2 with significance level set to 0.05.

RESULTS

The average age of the 239 female participants was 34.8 years (range, 18-59, SD 10.3), with the 164 deployed participants being older (mean 37.5 years) than the 75 who had never deployed (28.9 years). Both groups had similar numbers of children (mean, 2.37 vs. 2.09); fewer of the deployed females were single/never married (25.5% vs. 35.5%). More deployed females had college degrees and/or attended graduate school (33.3%/19.4%) than those who never deployed (18.4%/18.4%) and were actual employees of the National Guard (57.8% vs. 34.7%). These results are in Table 1.

Table 1. Demographic Variables of Sample

Variable	All Participants	Deployment- Yes Mean (SD) N/%	Deployment- No Mean (SD) N/%	P
Age	N=239 34.8 (10.3)	N=164 37.5 (9.6)	N=75 28.9 (9.1)	< .001
Number of children	N=241 2.28 (1.4)	N=165 2.37 (1.4)	N=76 2.09 (1.4)	0.143
Marital status	N=241	N=165	N=76	0.038
--Single, never married	69	42 (25.5%)	27 (35.5%)	
--Married/partnered	108	76 (46.1%)	32 (42.1%)	
--Divorced/separated/widowed	64	47 (28.5%)	17 (22.3%)	
Highest level of school	N=241	N=165	N=76	0.014
--High school/GED	20	8 (4.8%)	12 (15.8%)	
--Some college	106	70 (42.4%)	36 (47.4%)	
--College	69	55 (33.3%)	14 (18.4%)	
--Some graduate school	46	32 (19.4%)	14 (18.4%)	
<u>Relationship with National Guard</u>	N=241	N=166	N=75	0.004
--Member, attend monthly sessions	101	57 (34.3%)	44 (58.7%)	
<u>--Paid employee of National Guard</u>	<u>131</u>	<u>101 (60.8%)</u>	<u>30 (40.0%)</u>	
--No longer a member	9	8 (4.8%)	1 (1.3%)	

For non-deployed females, there was a positive correlation between PTSD and depression, coping, family hardiness, family functioning, and parenting strain (all $p<.01$). This group had a positive correlation between depression and coping ($p<.01$), family functioning ($p<.05$) and parenting strain ($p<.01$). For deployed females, there was a positive correlation between

hardiness and family functioning, parenting strain, and age (all $p < .01$). Among deployed females, there was also a positive correlation with coping and hardiness, family functioning, and age (all $p < .01$).

Table 2

Spearman Correlation Coefficients of Study and Demographic Variables for Deployed (below diagonal line) and Non-deployed (above diagonal line) Women

	PTSD	<u>DEPRESSION</u>	<u>COPING</u>	<u>FAMILY HARDINESS</u>	<u>FAMILY FUNCT</u>	<u>PARENTING STRAIN</u>	AGE	MAR	EDUC	GUARD	KIDS
PTSD		.44**	-.31**	-.48**	-.43**	.44**	-	-	-	-	-
<u>DEPRESSION</u>	.52**		-.33**	-	-.28*	.43**	-	-	-	-	-
<u>COPING</u>	-.47**	-.45**		.34**	.39**	-	-.26**	-	-	-	-
<u>FAMILY HARDINESS</u>	-.39**	-.31**	.54**		.67**	-.41**	-	-	-	-	-
<u>FAMILY FUNCTION</u>	-.38**	-.29*	.46**	.58**		-.33*	-	-	-	-	-
<u>PARENTING STRAIN</u>	.47**	-	-.38**	-.36**	-.47*		-	-	-	-	-
AGE	-.23**	-	-	-	-	-.21*		.41**	.47**	.25*	-
MAR	-	-	-	-	-	-	.25**		-	.35**	.42**
EDUC	-	-	-	-	-	-	.20*	-		-	-
GUARD	-.20*	-.22**	.22**	.21*	.26**	-.27**	.09	.09	.17*		.26*
KIDS	-	-	-	-	-	-	.30**	.31**	-	-	

Note. * = $p < .05$, ** = $p < .01$;

For deployed women, $n = 149 - 166$ except for parenting strain variable, $n = 99 - 104$;

For non-deployed women, $n = 69 - 76$ except for parenting strain variable, $n = 37 - 39$;

PTSD = PTSD Checklist – Civilian;

DEPRESSION = Major Depression Inventory;

COPING = Coping Checklist;

FAMILYHARDINESS = Family Hardiness;

FAMILYFUNCTION = APGAR measure of family functioning;

PARENTINGSTRAIN

AGE = participant age;

MAR = marital status;

EDUC = education level;

GUARD = relationship with the National Guard;

KIDS = number of children.

Deployed individuals had significantly higher PTSD scores (35.05 vs. 27.47, $P < .001$),

significantly lower coping scores (9.02 vs. 9.95, $p = 0.0032$) and significant higher family

functioning scores (2.84 vs. 2.47 $p = 0.24$). There were no significant differences in the three

variables of depression, family hardiness and parenting strain. These results are shown in Table 3.

Table 3. Comparison between Deployed and Never Deployed Participants

Variable	Deployment		P
	YES Mean (SD) N	NO Mean (SD) N	
PTSD	35.05 (16.23) N=155	27.47 (12.21) N=72	<.001
Depression			0.154
No depression—n (%)	139 (83.23)	66 (85.71)	
Mild --n (%)	6 (3.59)	5 (6.49)	
Moderate—n (%)	7 (4.19)	1 (1.30)	
Severe n(%)	15 (8.98)	5 (6.49)	
Coping	9.02 (2.48) 165	9.95 (2.25) 75	0.003
Family hardiness	64.98 (9.38) N=149	64.87 (10.96) N=70	0.414
Family functioning	2.84 (2.82) N=158	2.47 (2.99) N=74	0.024
Parenting strain	12.76 (5.37) N=104	12.62 (6.12) N=39	0.276

* Significant demographic variables age, marital status, highest level of school and current relationship with unit were included model to account for possible bias.

DISCUSSION

Military deployment and separation from family is a stressful event for all concerned. Family members carry these stressors, memories and emotions with them to the return process of reintegration. Women’s absence from and return to families involves renegotiating a different set of roles than those filled by men. Changes in relationships at home and work will have shifted during the deployment, which itself may have been a positive or a negative experience. To account for special features that may be present in the population of National Guard families, this study compared the individual and family characteristics of women who were deployed to a combat zone with those who had not had a deployment. While a variety of studies compare these characteristics in men and women who have been deployed, few studies examine differences between deployed and non-deployed military groups.

Results showed that women in the National Guard who had been deployed had higher scores on the PTSD instrument but similar rates of depression when compared to women who had not deployed. Several researchers have reported on significant post-deployment PTSD rates. For example, Beder and colleagues (2011) found 22% of the 871 male and female members of the armed forces reported symptoms of PTSD. In a sample of 5,000 National Guard soldiers deployed to Iraq, researchers found rates of PTSD among females to be 18% at three months and 17.9% at six months post-deployment among females (Riviere, Kendall-Robbins, McGurk, Castro C. & Hoge, 2011).

The finding of lower coping scores among the deployed group is an important one. However, from a cross-sectional study, it is not clear if problem coping strategies are instrumental in the development of PTSD. For deployed females, other known risk factors include combat exposure and injuries, military sexual trauma, and alcohol use, as well as reintegration challenges such as job instability or homelessness (Boyd, Bradshaw & Robinson, 2013). Subsequent functional coping with one or more of these risk factors would be a challenge for any woman. Murphy and Fairbank's 2013 review found few research-based interventions that are available for military families living in communities and the results of our qualitative work suggest that women in the National Guard would welcome venues in which to discuss their experiences ().

Interestingly, no differences were found between the two groups on two of the three family level variables and one variable, family functioning, had significantly higher scores among women who had been deployed than among those who had not. These results suggest that National Guard families do have high levels of resilience and strengths. These findings about National Guard families support the conclusions of Sheppard and colleagues that "military

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families are not inherently “at risk” per se and may indeed be a healthy and robust group... [whose] robust stressors ... may make them a special population but not an at-risk population in general” (Sheppard, Malatras & Israel, 2010, p. 603-4).

Explanations for this finding point to the importance of assessing the developmental phase of the family and the presence of additional stressors. Younger families and those that have not previously worked through difficulties will not have these experiences from which to draw. On the other hand, if a family has multiple challenges, such as economic limitations, physical or mental health problems, the additional burden of deployment can be overwhelming (Interian, Kline, Janal, Glynn, Miklos & Losonczy, 2014). The presence of these potential contributors to family resiliency in deployed and never deployed women was not assessed in this study.

A second potential explanation, which intersects with the developmental phase, is the time since deployment. Family structure and function is dynamic and what existed at the time of deployment, even one year ago, can easily change. In this study, it was not possible to assess the impact of divorce, children growing and adapting to different family relationships contributed to reintegration family functioning, since participants responded to how their families performed now. While such an assessment is a challenge when retrospectively collecting data, prospective pictures are equally limited unless one can identify a large enough sample to group families in time since return from deployment.

This fluidity also calls into question exactly how to apply the Family Resiliency Model. Do we consider it resilient for a woman to divorce and move on from a partner who was at best only minimally functional when she was deployed? Or would resilience be seen in keeping one’s family together? Even families with strong, positive relationships can be torn apart by external stressors that come up over and above that of the deployment of mother and/or wife. Finally, the

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3 Model is gender-neutral, making no distinction between types of crises and stress, or between the
4 deployment of a father/husband (more common, expected) or a mother/wife (less common,
5 unexpected). While useful as a way to frame initial thinking and questions about the functioning
6 of families of female military members, we suggest that the model is not able to fully capture the
7 many varied factors of the reintegration process.

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15 The limitations of this work include that of any convenience sample. Recruitment of a
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17 representative sample has been a challenge for military family researchers. Even studies that are
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19 presented to whole units find a disproportionate number of older participants, meaning less
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21 representation of the highest risk members of any military group (personal communication,
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23 Captain Angela Martinelli, March 2014). Recruitment strategies are needed that accurately
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25 reflect military populations and that balance adequate incentives with the ability to refuse
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27 participation.
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31 Another limitation is that we did not ask, in our demographic data, about the time since
32 return from deployment. This information, plus the composition of the family at that point and in
33 the present, would provide a more nuanced picture of the reintegration process and the variable
34 nature of PTSD symptoms. An additional limitation is that the perspectives of family members
35 are not reflected in this current work. An understanding of these experiences and their
36 concordance with female military members would be an important area for future research.
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38 Finally, it is important to acknowledge that the minimal sample size could have affected the
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40 results of the analysis.
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50 51 **Contribution to Family Nursing Practice**

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53 The strengths and coping skills with which a woman returns from deployment will be
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55 important in the reintegration process. These results suggest that it is important for family nurses
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to recognize the importance of women’s individual coping skills, even when focusing on family functioning. Interventions with the goal of improving coping skills are important for this population. An intervention that focused on women’s coping skills, whether through peer support, stress management or individual counseling, would result in a win-win outcome for both improved individual and family functioning. Conversely, focusing exclusively on the family unit while ignoring women’s coping abilities could easily result in a stalled situation. We suggest that nurses working with women in the National Guard and their families must assess both the family as a unit and the women as individuals to accurately understand the strengths and challenges of this population.

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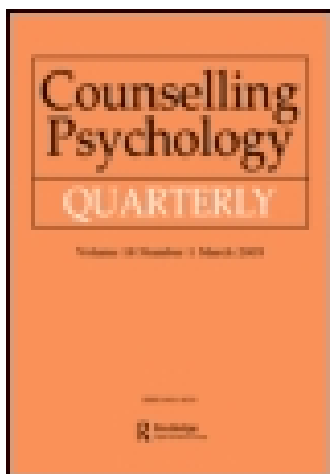
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APPENDIX 3

Nilsson, JE, & Berkel, LA, Kelly, PJ, Trummer, M., Maung, J., & Sukumaran, N. (2015). Women in the National Guard: Experiences with children during deployment. *Counselling Psychology Quarterly*, 28, 2, 113-31



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Women in the National Guard: Experiences with children during deployment

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Women in the National Guard: Experiences with children during deployment

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More women of the National Guard and Reserves have deployed to combat zones overseas than ever before. Upon reintegration, these soldiers often face a number of stressors related to their combat zone experiences and readjustment to civilian life. One of these stressors is the reintegration with family, partners, and children. This qualitative study involved interviews with 30 women from the National Guard regarding their reintegration experiences with their children. Four categories were revealed from the data: (a) Concerns for Children's Well-being, (b) Sense of Loss (c) Reintegration: Personal Challenges, and (d) Reintegration: Children's Reactions. Implications for clinical work with returning soldiers and further research are discussed.

Keywords: women; children; deployment; reintegration; military; National Guard

Since 2001, more than 700,000 US children had a parent deployed to the wars in Afghanistan or Iraq (American Psychological Association [APA], 2007). A substantial number of these children have mothers who served in the National Guard. Of the soldiers that serve in the National Guard, about 16% or close 73,000 are women (The Women's Memorial, 2011). While the National Guard has traditionally been used to provide relief services during natural disasters such as floods and earthquakes in the United States, these units are now, due to budget cuts and post-9/11 military engagements, mobilized to serve in war zone deployments (Renaud, 2005). These changes mean that many women in National Guard units have experienced multiple and longer term overseas deployments than ever before in history, often with only short time periods between assignments and assignments given with limited notice (Carson & Hastings, 2012). Given the history of these units, it is possible that many soldiers in the National Guard do not foresee the possibility of extended and multiple deployments to dangerous war zones, and are potentially less prepared to effectively deal with family separation and post-deployment reintegration. At this point, little is known about these women soldiers and their children's experiences with war separation and reintegration. In this study, we explore the reintegration experiences of these women, particularly as they relate to challenges concerning their children.

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Compared to active duty personnel, the lived context of individuals serving in the National Guard is different. National Guard soldiers tend to be older and less integrated into military life (Lane, Hourani, Bray, & Williams, 2012). Many live in communities with few, if any, military families and have less access to support services than active duty families. Upon deployment, they must make detailed plans to take extended leaves from their civilian jobs and to find care for their children (Kline et al., 2010). Such disruptions are often associated with significant financial and transitional difficulties (e.g. Lane et al., 2012; Street, Vogt, & Dutra, 2009). After deployment, National Guard soldiers return to their homes, jobs, and communities without the time, day-to-day supports, and camaraderie provided by the military units of full-time soldiers working on a base (Kline et al., 2010; Pfefferbaum, Houston, Sherman, & Melson, 2011). Such soldiers return to communities and families where there is a minimal culture of support and acknowledgment of what they have experienced. Employers, peers, neighbors, and schools may have only the sparsest knowledge of where soldiers were posted, what their roles were, and how the family functioned in their absence (Waldman, 2009). In fact, several studies have found that reserve units (including the National Guard) report more mental health problems, such as anxiety, depression, and PTSD, than members of active duty units (e.g. Lane et al., 2012; Thomas et al., 2012).

Current research suggests that the deployment experience can drastically impact women's health and well-being, potentially impacting their ability to carry out their civilian roles, like that of a mother. Both trauma and stress models have been used to understand the reintegration process for soldiers (e.g. McCubbin & McCubbin, 1993; Wiens & Boss, 2006). Such models highlight risk and protective factors for families faced with serious stressors. For the present study, the Resiliency Model of Family Stress was used as theoretical framework, modified based on the work of Hill (1949), to understand the impact of separation and reintegration on families due to war (McCubbin & McCubbin, 1993). This theory proposes that the outcome of reintegration depends on the interplay of various factors that influence a family's reaction to crisis such as family strength and functioning, available resources, and action taken to lessen the demands. The model has been applied to families across a wide spectrum of ethnic and economic populations facing challenges such as economic stress, violence, and alcoholism (Robinson, 1997).

Women service members are often enlisted in "combat support" jobs, such as military police, transportation, mechanics, and civil affairs; these jobs place them at risk for stressors that are associated with mental health concerns within the overall military population (Boyd, Bradshaw, & Robinson, 2013; Hoge, Clark, & Castro, 2007). Although women soldiers tend to report lower rates of exposure to high-intensity combat situations compared to their male counterparts (Street et al., 2009; Vogt et al., 2011), their exposure to trauma has increased over the years. Maguen, Luxton, Skopp, and Madden's (2012) study of 7251 active duty soldiers study showed that 31% of women soldiers had been exposed to death, 9% had witnessed killing, 7% had suffered from injury in the war zone, and 4% had killed in war. In comparison, 66% of men had been exposed to death, 45% had witnessed killing, 14% suffered injury, and 35% killed in war. Earlier studies show that women soldiers' exposure to trauma has clearly increased. A study conducted on Gulf War female veterans found that 14% reported being exposed to death, 2% reported combat injury, and 1% had killed (Carney et al., 2003).

In addition to such deployment-related experiences and stressors, women in the military also report gender-based harassment, unwanted sexual attention, sexual coercion, and sexual assault (e.g. Kelly, Berkel, & Nilsson, 2014; Kelly, Nilsson, & Berkel, 2014; Murdoch, Pryor, Polusny, & Gacksetter, 2007). Sexual trauma, such as rape or unwanted physical and sexual contact, during military service is believed to affect 12–15% of servicewomen (Haskell et al., 2010; Kimerling et al., 2010; Maguen et al., 2012), and is associated with poorer physical and mental health, including PTSD, anxiety, and depression (e.g. Kimberling, Gima, Smith, Street, & Frayne, 2007; Street et al., 2009). Such stressors and their related mental health issues may affect women's adjustment to civilian life, including relationships with their children.

With their increased exposure to war and military sexual trauma, female service members are at risk for developing mental health problems that may negatively impact their reintegration into civilian and family life. For example, the literature has well documented the association between deployment-related trauma and PTSD (Himmelfarb, Yaeger, & Mintz, 2006). PTSD symptoms have been associated with self-reports of poorer parenting efficacy (Gewirtz, Polusny, DeGarmo, Khaylis, & Erbes, 2010) and may make mothers more reactive and impulsive with their children, thus resulting in poorer family adjustment (Chemtob & Carlson, 2004). Notably, the reintegration process is considered difficult for the returning service member even without the complications that arise when coping with mental health issues. For female and male soldiers, concerns reported include disrupted communication patterns, losing one's role in the family, conflicts with family members when assuming one's old family role, missed important milestones in the children's lives, and difficulties retaining a strong child–parent relationship (Bey & Lange, 1974, cited in Kelley, Herzog-Simmer, & Harris, 1994; Boyd et al., 2013; DeVoe & Ross, 2012). The literature is less thorough in explicating the unique experience of deployed female soldiers, though it is evident that contextual and demographic factors may compound family difficulties during reintegration. The US Department of Defense (2010) reported that military mothers are usually younger, of lower socioeconomic status, and more likely to be single or partnered with a military spouse.

About 9% of soldiers in the reserve units are single parents, double the number of active service members (Office of the Deputy Under Secretary of Defense [ODUS], 2012). Military women with children are more likely to report significant declines in physical and mental health and report psychological issues such as anxiety and depression after deployment (The Joint Economic Committee, 2007). The pre- and post-deployment processes might be especially challenging for single mothers, a growing segment of today's National Guard and Reserves members (ODUS, 2012). Dutra et al. (2012) reported that single military mothers who must leave their children with grandparents or other family members have a particularly difficult time with the separation. Kelley et al. (1994) found that single mothers, who were anticipating deployment in the navy, reported more separation anxiety and less family cohesiveness, commitment, and support than did married mothers.

Although several studies have investigated the effect of deployment on women's health and adjustment, conclusion regarding the impact of deployment on children's health and well-being remains uncertain due to a range of methodological limitations. For example, White, de Burgh, Fear, and Iversen (2011) suggested that studies tend to overly rely on retrospective reporting and cross-sectional designs and overlook potentially confounding variables, such as pre-existing child temperament or behavioral

issues. A related concern with this literature is that it poorly delineates the effects of deployment on non-traditional families, including National Guard members and minorities (APA, 2007). More specific to this study, the literature either does not conclusively explicate how family functioning differs when the deployed parent is the mother (e.g., Chandra et al., 2010) or it solely considers paternal deployment (Barker & Berry, 2009).

In their study of young children, Barker and Berry (2009) found that both length of deployment and number of deployments were positively associated with increased behavioral problems, such as clinginess and tantrums. Many children in this study also showed, at least initially, attachment problems in terms of confusion and distress, at the time of reintegration with the deployed parent. This distress was shown by not wanting to sleep in their own bed, preferring the non-deployed parent, or not wanting the deployed parent to leave the room.

A recent meta-analytic study showed an association between deployment and children's maladjustment. Of the 16 studies surveyed in this article, most of the deployed parents were fathers, a median of 92%, which speaks to the lack of current research regarding maternal deployment. Although the effect size was small, there was evidence that parental deployment was associated with externalizing behavior (e.g. aggression), internalizing behavior (e.g. anxiety), and academic difficulties among children (Card et al., 2011). Card et al. also concluded that, compared to children of other age groups, children in middle childhood tended to experience the poorest outcomes related to parental deployment.

Compared to young children, older children and older siblings may have to take on greater household responsibilities, such as doing more chores and caring for younger siblings, during a parent's deployment (Chandra et al., 2010). In fact, adolescents with deployed parents have shown increased stress, blood pressure, and heart rate compared to controls (Barnes, David, & Teiber, 2007). Based on their review of literature on the impact of deployment on children, White et al. (2011) concluded that family stress and mother's mental health were the strongest predictors of negative outcomes. Similarly, Flake, Davis, Johnson, and Middleton (2009) found that parenting stress, rated by army spouses, 87% of whom were female, was the strongest contributor to children's poorer psycho-social functioning. In a longitudinal study conducted on air force mothers deployed during Desert Storm and Desert Shield, children's adjustment problems appeared to increase when deployments caused significant changes in the children's lives or the deployed mother had difficulty providing care for her children. However, the study also showed that while children tended to show various adjustment problems due to deployment, these problems were transient (Pierce, Vinokur, & Buck, 1998).

Although the reintegration experience is challenging for all soldiers, the goal of this study was to document the post-deployment family reintegration experiences of women in the National Guard, a population that remains largely understudied despite their increasing role in today's military forces. To date, minimal studies have employed qualitative methods to fully document how female service members experience leaving and returning home to their children. This study was conducted to explore the unique challenges endured by members with children, by interviewing previously deployed women soldiers in the National Guard regarding their deployment and reintegration stressors concerning their children, with the goal of gathering data to support the development of needed and effective resources for this population.

Methods

As part of a larger study on female National Guard members from Iowa, Kansas, Missouri, Nebraska, and North Dakota concerning reintegration experiences, this study focused on the 30 participants reporting having children during their deployment. The participants' ages ranged from 23 to 50 (mean = 39 years, SD = 10.5; data on age were missing from 17 participants). At the time of the interview, 11 (37%) soldiers were married, 13 (43%) were divorced, and the remainder were engaged/partnered ($n = 3$, 10%), single ($n = 2$, 7%), or separated ($n = 1$, 3%). The number of children of the participants ranged from 1 to 4. Eleven participants (37%) reported having one child, nine (30%) reported having two children, four (13%) had three children, and six (20%) had four children. Four of the participants identified their children as stepchildren. The children's ages at the time of deployment ranged from infancy to young adulthood (mean = 13.33). Within this sample, 23 (77%) women had been deployed once, six (20%) women had been deployed twice, and one (3%) woman was deployed three times. Among these deployments, Iraq was the most common deployment destination followed by Afghanistan. Other deployment destinations included Kuwait, Turkey, United Arab Emirates, and countries in Africa. Deployments lasted from 3 weeks to 14 months (mean = 9 months, SD = 3.70 months). The vast majority reported a variety of jobs during their deployment such as nurse, medic, platoon leader, flight technician, plumber, and project manager.

Interview schedule

We conducted semi-structured interviews with soldiers using questions based on the Family Resiliency Model (McCubbin & McCubbin, 1993). Interviews were conducted by the investigators of the study (the first three authors), a nurse practitioner, and two counseling psychologists, all women. Interviews were audiotaped and began with general background questions about participants' demographics. We asked about the structure of and changes to their support system, their experiences of reintegration, and their family's response to the transition. We also inquired about stressors experienced before, during, and after their deployment; resources that they and their families used during and after deployment; their appraisal of these resources; religiosity; and recommendations to improve the resources. Individual interviews were transcribed verbatim by a graduate student assistant.

Data analysis

From the larger data-set of 42 participants, we used the data from the 30 participants who reported having children; this allowed us to focus solely on the experiences of soldiers who also were mothers. The HyperResearch qualitative software package was used in the cross-analysis portion of the data analysis.

A research team consisting of one faculty member in counseling psychology (White female) and three students (Asian Indian, Asian American, White, and all women) engaged in this stage of the data analysis. All four research team members participated in the original research team and are authors on this paper.

Guided by techniques of conventional content analysis, transcripts were reviewed and significant statements and key phrases assigned codes by the research team. This

analytic approach is appropriate when “existing theory or research literature on a phenomenon is limited” (Hsieh & Shannon, 2005, p. 1279). Specifically, we used the analytical procedure for qualitative investigations proposed by Marshall and Rossman (1999). After training and reading through several interviews, we engaged in the second phase of Marshall and Rossman’s approach that included generating categories, themes, and patterns as we were already immersed in the data. Together, we worked to develop more specific categories and subcategories than were developed during step one of the data analytic process. After reaching an initial consensus of these categories and subcategories, two of the team members individually re-read and coded all the data, revising and adding subcategories when needed. In the third step of the analysis, the team met to discuss revisions of the categories and subcategories until all of the data were coded and final descriptions for each theme and subcategory were created. Finally, the fourth and fifth stages of the analysis involved working with the data by testing emergent understandings and searching for alternative explanations; that is, we examined the data as a whole to develop a broad understanding of the patterns, including patterns that did not fit the themes resulting from the prior analysis. We reconciled discrepancies by searching for alternative explanations to the data and by modifying categorizations whenever necessary (Marshall & Rossman, 1999).

Once the data analysis was completed, a White male counseling psychologist with expertise in qualitative research served as an auditor of the study to ensure trustworthiness of the findings. He reviewed and evaluated the methods, data analysis processes, interviews, and the findings to ensure confirmability, credibility, and dependability.

Researcher-as-instrument statement

Prior to completing any interviews, the researchers discussed their beliefs and attitudes about women in the military and their expectations of what they thought the data would reveal. Through this process, we acknowledged that while several of the team members were able to identify family members who had served in the military, none of the team members had any military experience themselves. Several team members reported feeling like “outsiders” to the military culture, while also expressing admiration for soldiers for their sacrifice in military service. Additionally, when there was admiration expressed, several members also wondered about the women’s decision to join the National Guard, particularly when there were young children in the home.

Procedures

Permission was secured from each state National Guard unit to recruit women from their units via word of mouth, flyers posted at National Guard units, and announcements on the units’ Facebook pages. Women who were interested in participating contacted the investigators and a convenient time for an interview was arranged. A consent form approved by the university’s Institutional Review Board and the Office of Research Protections of the United States Army Medical Research and Materiel Command was read to each woman prior to beginning the interview. When available, some women received the consent form via electronic mail and returned the signed consent form electronically or via fax.

Results

The focus of this specific study was not on the women's reintegration experiences in terms of their mental health, financial and vocational processes, relationship with partners, and family of origin. These themes do, however, provide the backdrop for women's experiences readjusting to their role as mother and relating with their children. For an extensive review of these contextual realities, see Kelly, Berkel, et al. (2014). For this study, four categories were revealed: (a) Concerns for Children's Well-being with several subcategories: Act of Leaving, Placement During Deployment, Retaining Relationship while Deployed, and Stressors at home; (b) Sense of Loss; (c) Reintegration: Personal Challenges with subcategories of Emotionality and Mental Health, Children's Reactions to their Mother's Reintegration Difficulty; and (d) Reintegration: Children's Reactions with subcategories of Attachment, Emotional Reactions, and Adjustment over time.

Concerns of children

Almost all participants reported worrying about their children while preparing for and during their deployment, and most believed that their deployment had been tough on their children. During interviews, it became clear to us that the women began feeling concerned about their children even before deployment, and that experiences at this stage of the deployment process could affect the reintegration experiences. This category included four subcategories that seemed to highlight the unique concerns and stressors identified by the participants: Act of Leaving, Placement during Deployment, Retaining Relationship while Deployed, and Stressors at Home.

The Act of Leaving

Most of the participants (77%) in this study had only deployed once, and while some seemed willing to serve again, others feared the impact it could have on their children. One participant, with an 11-year-old child during her second deployment, described it this way:

That was a lot harder. When I had to tell him six months later I was getting deployed again to Iraq it was really hard to tell him. And he didn't take it very well at first. He was like, "Mom, you just got back."

A 33-year-old participant with two young children, who had been deployed three times, described it this way:

It was hard for me to leave. I usually sent my kids, well for the first two [deployments], I sent my kids ... to my family. And on the last one, [child's name] was in preschool so I could not send her and I actually left in the middle of the night; it was hard to leave the kids.

As concluded by one participant with several children,

Well, I just, I hope ... I don't know. I hope I don't ever deploy again. I hope that I'm overlooked. I want to serve, but I want to serve in the capacity that I'm able to and I think deployment for me, my family would just be too devastated. It would be too much for

them. And I know families who have the males deploy more than once and I see how hard it is on them. But having the female gone is so much different than having the male gone and I can't explain it. And I can't explain it.

Regardless of the number of times women were deployed, the Act of Leaving a child or children produces concerns. Statements from the participants highlight the distress they felt prior to deployment.

Placement during deployment

One major concern in the process of preparing for deployment was the placement of their children while gone. Many participants made great effort to ensure their children would be well cared for during deployment and many expressed how emotionally difficult and stressful it was for them to leave their children. This appeared to be especially true for participants who left young children and for the participants who were the sole or main guardian of their children. While most participants seemed able to leave their children with husbands and partners, others expressed a great deal of concern over the need to uproot their children to live with relatives or friends in other towns, states, and even other countries during deployment. For instance, a single mother who had left her son with a friend, the friend's husband and their two children, reported concern about her child's adjustment to, not just being without his mother, but to now being one of three children.

Many children seemed to struggle with the reintegration process; data revealed that several of the children, who had to move to other locations or live with family members and friends during the deployment, showed strong and at times surprising reactions to their mother's return. According to some participants, their children did not want to return to live with them and for others it took much longer than expected to return home. Further, children who had lived under the expectations and rules of someone else had difficulties adjusting back to the daily routines they once had with their mother. One mother talked about her relationship with her teenage son who had lived with someone else during deployment:

It was hard. He was, we had both changed, you know, he was becoming a teenager. We're very close, we still are very close. But it was a different reintegration because he'd been living with someone else, under someone else's rules. And then when I came home I wanted him to do things like I had been used to. I said, "[child's name], go do this," and he finally one day looked at me and said, "Mom, I'm not one of your soldiers."

Asking for family members or friends to care for children while on deployment proved stressful for many of the participants. Timing and the nature of the placement also seemed to be factors related to how children and mothers handled the children's new environment. Placement of children may have also influenced the quality of relationship the children had with their mothers while they were deployed.

Retaining relationships while deployed

For most participants, involvement in family life did not stop during deployment, but the level to which the participants remained involved varied quite a bit. This difference appeared due to the soldiers' location and duties during the deployment along with their

psychological ability. Many kept regular contact with their children via email, phone, or Skype. Some remained in such regular and close contact that they could help their children with homework.

For others, however, ongoing contact was much more difficult and they could only speak with their children on rare occasions. Yet even with the opportunity to talk with their children, some expressed pain and disappointment because of the difficulty they had bonding with them, many children did not want to open up to them. Others choose to limit their contact with, and participants referred to this as a need to compartmentalize feelings and experiences – life as a soldier vs. life as a mother.

Stressors at home

For those who communicated regularly with family, it was apparent that life at home did not come to a halt during deployment. The life of the soldiers' parents, partners, husbands, extended family members, and children went on and could many worries, significantly impacting the well-being of the deployed soldier. Several participants expressed helplessness for not being available for their families at home. For instance, one participant reported that her teenager was failing his classes while she was deployed. Another reported that her daughter was stopped for drinking and driving: "Well my daughter at 19 had just got picked up for drunk driving and three weeks later after that, she got picked up again so, that was a lot of stress that ... I couldn't control."

Others reported feeling guilty for not being able to help out more at home, "That was probably the biggest challenge – I couldn't do anything from where I was, really far away. But that was the hardest part, not being able to help." In addition to feeling they could not provide enough support for their children, some also felt burdened by the expectation to remain in the caregiver role,

You know, it was always me trying to lift him [my husband] up, you know and I could only do that for so many months before I was like I can't do this anymore, I can't be strong for all of us.

Sense of loss

Although participants disclosed situations and events at home that resulted in stress, participants also discussed their feelings about not being around for or not feeling part of events they considered important for their children. For many participants, being deployed meant missing out on special events with their children such as developmental milestones, birthdays, and holidays. These losses were experienced as painful. One participant described it this way: "Well, I did. You know, I missed Thanksgiving and I missed [child's name] programs at school and that kind of stuff. Yeah that was tough ..."

Reintegration: personal challenges

Emotionality and mental health

Some participants talked about the reintegration process as rather easy (e.g. growing closer to parents, siblings, children, and partners), but the majority expressed serious

difficulties with adjusting back to civilian life and to their role as a mother. Another woman described the adjustment process as initially so difficult that she wanted to get redeployed:

Well, I think it was because for five months, I was going at a ... just a break-neck speed every single day. I did not get a lot of sleep the entire time I was gone. It was a very, very high stress job that I held. You know, of course, we were bombed, and you know, your life of course feels threatened you know most days. And I was just kind of caught up in that whirlwind, so to come back and to one day be armed and in uniform and then the next day be in civilian clothes and you know, be a wife and mom. It was just hard to step out of that role, if you will. It was so hard, in fact, that for several months after returning I just wanted to go back. Because it was so hard to try and reintegrate.

The data revealed that most participants reported experiencing resentment, frustration, and irritation returning from deployment. Several also expressed difficulties controlling their anger and feeling emotionally out of control. It appeared that most participants felt unprepared for their intense emotional reactions,

I'm doing better but it was, it was really difficult coming back for, for a number of reasons, but I had a, I had a really like tough time that I didn't anticipate. Honestly I didn't expect it, but I had a lot of anger.

Another participant described it as, "I just feel like I can fly off of the handle more easily than I could before."

Some participants discussed how mental health problems, like PTSD and depression, made the reintegration process even more difficult, "I think I had PTSD when I came back from Desert Storm because I had memory loss, weird things, I'd forget the kids' birthdays, forget which keys opened the door; forget my telephone number."

Children's reactions to their mother's reintegration difficulty

Some participants talked about the difficulties they had in being present with their children, overwhelmed by the daily demands while simultaneously longing for the space to internally process what they had experienced during the deployment.

I was physically here, but mentally I was checked out. I was still back in Iraq. So, to just kind of, like mentally get reengaged with my kids, it was just really hard. You know, they just wanted their mom back and I just wanted to be alone to kind of process what I had experienced.

A mother of four children talked about how her children reacted to her emotionality and her need to be alone.

Instead of getting out of that chaos and back to some sort of order and peace and continuity, you came back only to find that you have another state of chaos that you have to deal with – your family! There are those that were shook up because you don't look like you did when you left. So the kids, they don't know how to talk to you then because they don't know if you are going to snap out for some reason and start yelling. They don't understand when you sit in the corner kind of quiet, by yourself while everyone else in the family is laughing and talking.

Reintegration: children's reactions

Like their mothers, children showed a wide range of reactions to the reintegration process, according to their mothers. Three clearly interrelated subcategories were revealed in this section: Attachment, Emotional Reactions, and Adjustment over Time.

Attachment

Due to the mothers' deployment, some participants reported that their children formed close attachments with other family figures. For example, some children grew closer with their fathers or grandparents. At times, the participants viewed this as positive; however, in other situations, it appeared that when some children formed such a close attachment with another significant caregiver that it was difficult for the participants to re-establish the closeness they had once had with their children. As explained by a participant regarding her four-year-old son's reaction to her return, "He would always go to his sisters or he would go to my mom, because my mom was over there a lot. And he still has a much stronger bond with my mom than with me." Such experiences caused participants a great deal of sadness.

While the children of some participants responded to their mothers' return by keeping distance, others reacted in the opposite way. Some participants with younger children reported that their children did not want to leave their sides. "My son was attached at the hip the minute I got home." Such attachment issues and the associated issue of children's fear of their mother redeploying was common,

... it probably took, I would say a good 6 months, 6–9 months for him to be okay with me leaving. I mean he still talks about when I left ... and he still talks about when I came home.

Emotional reactions

Some children responded with withdrawal, anger, and frustration ... A participant described the difficult reconnection process with her daughter,

My daughter and I had a really tough time, her telling me that I didn't care about her friends, I didn't care about things because I couldn't talk about it. I didn't know what was going on, so we had a really tough time. I'd say we're doing fine right now, but it, it was really tough for me, and she told me I didn't give her enough time to get used to me being back, and so, I think on everybody it was tough.

Although not as common, a few participants talked about taking their children to receive psychological treatment due to attachment issues and separation anxiety. When marital problems were present, it seemed to make it even harder for children, as expressed by one mother:

It was just pretty bad all of the way around and by that point too, he had also, my daughter still feels this a little bit, because he has told her that mommy is going to get killed if she stays in the military and she [the daughter] has been going through a lot of counseling.

Adjustment over time

As time passed, but not all, the participants' lives seemed to stabilize, their mental health improved, along with the relationships with their children, "[Child's name] and I are good now. Our relationship is back where it was. Both relying on each other, and, yeah. It's good." Another participant with four children concluded:

They were all pretty well adjusted to it, but, they were fine with me. They just weren't happy with the army. They just didn't want me to go back. They didn't want me to get deployed again. They didn't want me to leave again. They don't like it when I have to go to drill.

Other positive outcomes recognized by participants included that children were able to form a deeper or different bonds with their fathers and other caregivers, and some participants saw their children becoming more mature and independent.

Yet, while some participants talked about positive, seemingly lasting effects, others reported feeling concerned and guilty regarding the toll they believed the deployment had taken on their children. As stated by one participant with one child:

I need to quit beating myself up because of it. But I don't know if I can because it is a byproduct of what I did to him. He's a good kid, he's an A-B student, a very smart child. But he is kind of a recluse and he didn't used to be.

Discussion

This study examined National Guard women soldiers' experiences of stress associated with their children during the deployment cycle. Four main categories were revealed: Concerns for Children's Well-being, Sense of Loss, Reintegration: Personal, and Reintegration: Children's Reactions.

The first category showed that participants began experiencing stress and anxiety concerning their children's well-being while preparing for deployment. Decisions made at this stage have the potential to impact the reintegration process. For women who were single and/or had young children, this planning stage seemed especially stressful. Other studies have found similar results; for example, Dutra et al. (2012) found that single military women struggle more with the separation process than married women. An estimated 9% of the National Guard parents are single and many have young children (ODUS, 2012). To be noted is that in the present study, 43% of the participants were divorced, suggesting an even larger portion of single parents. While we did not ask the participants whether they were divorced prior to deployment or if this occurred due to deployment, such data might be helpful in furthering the understanding of the reintegration process and its impact on families.

One of the pre-deployment decisions that appear to impact the mother-child relationship at the reintegration stage is the decision of where to place a child during deployment. When a father or partner was unable to host the child, participants had to place their children with other family members, sometimes in another city or even country. Others had to place them with friends, and siblings were sometimes separated. We know little about how these residential changes impacted the children psychologically; yet

from the participants' reports we know that many children reacted strongly and not always positively upon their mothers' return, and this seems especially true for children who experienced a significant change in residence during deployment. Clearly, more research is needed to gain insight into how to best help children during their mother's deployment.

Additional factors that may help explain children's responses to the reintegration process are the quality and ability of the mother to maintain a regular relationship with her children during deployment. While some participants reported having almost daily contact with their children (e.g. being available for homework and other daily concerns), others reported much less frequent contact. Although for some women, sporadic contact was not a choice but a result of their specific deployment placement and duties, other mothers reported choosing to keep a physical and emotional distance from their children. Keeping this distance appeared to be a way to cope with difficulty bridging two such separate worlds.

Many participants also expressed a sense of helplessness stemming from being too far away to be able to provide support for their children. The data also showed that some children experienced some unique, personal difficulties during their mothers' deployment, and others acted out, adding to the participants' sense of guilt and helplessness. A few participants expressed resentment, feeling that they had to continue the almost impossible task of remaining the emotional caretaker for the families while deployed – not just for their children but also for their partners.

The second category, Sense of Loss, correlates with what has been reported in previous studies (Boyd et al., 2013; DeVoe & Ross, 2012). Similar to these findings, the participants in this study described a wide range of stressors and emotions while deployed. Many participants worried over their children's well-being while gone, and also described painful feelings for not being able to witness their children's milestones (e.g. birthdays or attending school events).

Even though it is not surprising that the deployment experience was challenging because of the separation that women experienced from their children, women also reported that returning home – back to the role of motherhood – could be equally difficult (Category 3: Reintegration: Personal Challenges). Upon return, many participants reported feeling overwhelmed by the daily demands of life in general and motherhood in particular, such as shopping, cooking, and childcare. It appeared that the switch from deployment back to ordinary life was too sudden and that many would have liked more time alone to process what they had been through. They described themselves as emotionally reactive, quick to irritation, and anger when thrown into daily life; many appeared unprepared for their emotionality and had difficulties coping with it. Consistent with the literature, some participants talked about experiencing more serious mental health problems, such as PTSD and depression, and those struggles made the reintegration process even more difficult. The unique situation of National Guard soldiers compared to active units, such as the lack of organized support upon return, may make this group of soldiers not only more vulnerable to mental health problems (e.g. Lane et al., 2012; Thomas et al., 2012), but maybe also to family reintegration challenges. Facing their own mental health problems, it appeared that many participants had difficulties at least initially to meet their needs of their own or appropriately respond to their children's reactivity.

Not that different from their mothers, mothers reported that their children also expressed a range of different reactions relevant to their age (ranging from infancy to young adulthood during their mothers' deployment). The fourth category revealed many different manners through which children related and expressed attachment to their mothers upon their return. Some children responded with withdrawal, anger, and frustration while some older children appeared to express their anger by maintaining emotional or physical distance from their mothers. This is consistent with Barker and Berry's (2009) findings wherein many children demonstrated at least initial attachment problems such as clinginess, confusion, and distress during reintegration of the deployed parent.

In addition, several participants reported that their younger children who had lived with extended family members formed close attachments with other family figures, making it hard for some participants to re-establish the bond they once shared with their child as the primary caretaker, causing much stress and worries for the participants. This type of attachment confusion among children was reported by other researchers (Barker & Berry, 2009). Still other children reacted quite differently and stayed physically close to their mother's side and expressed anxiety about the possibility of future separations. For many participants, their children's strong need for reinsurance and physical closeness were also taxing for the women as they desired solitary time to process what they had gone through during the deployment. Although not as common, a few participants reported that they sought psychological services for their children to address the attachment issues and separation anxiety. These findings support previous studies that have indicated that deployment is associated with children's externalizing and internalizing behavior (Barker & Berry, 2009; Card et al., 2011) but also similar to other studies (e.g. Pierce et al., 1998) many women reported that their children's initial emotional struggles with reintegration decreased over time.

The present findings clearly suggest that deployment for women and their children can be a tumultuous experience with implications for the well-being of the mother, child and the mother-child relationship. The study showed that women's reactions to and managing of stress are individual and diverse. What is not extensively addressed in this study, but has been discussed in other studies, is that upon return, women soldiers may also have to deal with serious mental health problems (e.g. Kimberling et al., 2007; Street et al., 2009), marital problems, and financial and economic problems (Kelly, Berkel et al., 2014), potentially making the rebuilding of a strong parent-child relationship even harder. In support of the Resiliency Model of Family Stress (McCubbin & McCubbin, 1993), the results suggest that the women's functioning interplay with reintegration and that a lack of support services may further impact successful reintegration. Because National Guard units tend to have less access to support services that often provided by the military units of full-time soldiers (e.g. Kline et al., 2010; Lane et al., 2012), finding ways to support these families within their specific contexts is critical.

Clinical implications

The findings suggest that support for women both prior to and after deployment is needed. Planning for deployment can be challenging and stressful, as women need to prepare their children for separation and potentially find another home or caretaker for them while deployed. Services, such as psycho-educational groups or individual/family

counseling, should be available to support women, their partners, and children during this process and help prepare them for the upcoming separation and reintegration. Services to support the children's well-being should also be readily available during their mother's deployment. Furthermore, this study highlights the challenges experienced by both mothers and their children in relation to maternal deployment. Military mothers agree that support from their units, family readiness groups, and counseling services is critical to the health of them and their families (Goodman et al., 2013), but note that oftentimes, these services are geared toward families where the deployed soldier is male. Although there are more behavioral health services available to soldiers and their families, military mothers have reported that these are often offered at inconvenient times, and therefore are not fully utilized (Goodman et al., 2013).

Post-deployment support for returning women veterans and their families would be to provide access to support groups that focus on issues related to reintegration, specifically for women. Limited time for reintegration activities with families was identified in the literature as a concern for military mothers (Goodman et al., 2013). In our study, the women reported feeling somewhat isolated in that they were surrounded by family members and friends who did not share or necessarily understand their experience during the deployment and reintegration process. Thus, these women may benefit from opportunities to interact with other women who could both validate and understand their experiences, including their need to sometimes refrain from directly talking about their deployment experiences. Meeting with other women in a safe environment can help to challenge the critical self-talk that the women in our study sometimes engaged in, and the belief that one is alone in her experiences. In one study conducted of women veterans who experienced sexual trauma, women reported that at certain stages of their recovery, they would have found it helpful to know that others had similar experiences (Wing & Oertle, 1998 as cited in Wing et al., 2000). A support group can provide women with the opportunity to offer support to each other; this potential for altruism can be very beneficial therapeutically (Yalom, 1995).

Semi-structured support groups can also provide an opportunity for psycho-education about topics of relevance for returning women veterans. These topics can be generated by the women themselves, and may include tools for reconnecting with children and partners, recognizing problematic behaviors in children, and the identification of additional community resources for themselves and their families (e.g. recreation and activity; counseling; and psychiatric).

For women who live in rural areas or in places where there may not be a community of other returning women veterans, it may be beneficial to explore offering either phone or Internet support services that can provide some of the same benefits as an in-person support group. Phone support/focus groups and interventions are supported by the literature (Leach & Christensen, 2006).

Limitations and future research

Limitations of the present study include the make-up and generalizability of the present sample. As recruitment mainly occurred through National Guard websites and Facebook pages, the sample consisted of women who accessed these sites. In addition, missing demographic information about the participants' age and race/ethnicity limits

generalizability as well. Researchers interested in further examining this topic with women soldiers should address these limitations by recruiting a sample that is more representative of the national population of women veterans to increase the generalizability of the findings. Secondly, the discoveries of the present analysis were based on secondary data analysis, using a subset of the data collected for the larger study and therefore relevant information may not have been thoroughly explored. Future investigations could focus on an in-depth exploration of mothers' concerns for their children, how they prepared for their departure, and how they managed and addressed challenges with their children upon their return, for example. Similarly, the interviews focused on reintegration experiences, and the pre-deployment stressors were not specifically asked about but were rather brought up by the participants. Future research that specifically examines this important stage in a soldier's deployment experience can better inform clinicians how to support women who are preparing to leave. Despite these limitations, the findings reported here underscore that women soldiers in the National Guard and their children face major stressors and challenges during deployment and that they would benefit from services that would support them during this process.

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APPENDIX 4

Kelly, PJ, Berkel, LA, & Nilsson, JE. (2014). Postdeployment reintegration experiences of female soldiers from National Guard and Reserve units in the United States. *Nursing Research*, 63,5, 346-356.



Postdeployment Reintegration Experiences of Female Soldiers From National Guard and Reserve Units in the United States

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Background: Women are an integral part of Reserve and National Guard units and active duty armed forces of the United States. Deployment to conflict and war zones is a difficult experience for both soldiers and their families. On return from deployment, all soldiers face the challenge of reintegration into family life and society, but those from the National Guard and Reserve units face the additional challenge of reintegration in relative isolation from other soldiers. There is limited research about the reintegration experiences of women and the functioning of the families during reintegration following deployment.

Objective: The goal was to document postdeployment family reintegration experiences of women in the National Guard.

Methods: Semistructured interviews were conducted with 42 female members of Midwestern National Guard units. Directed content analysis was used to identify categories of experiences related to women's family reintegration.

Results: Five categories of postdeployment experience for female soldiers and their families were identified: Life Is More Complex, Loss of Military Role, Deployment Changes You, Reestablishing Partner Connections, and Being Mom Again.

Discussion: The categories reflected individual and family issues, and both need to be considered when soldiers and their families seek care. Additional research is needed to fully understand the specific impact of gender on women's reintegration.

Key Words: family health • female soldiers • qualitative research • reintegration

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Women are an integral part of the armed forces of the United States. Currently, over 200,000 women make up 15% of all active duty military—up from 1.3% in the 1960s. Another 72,000 serve in the National Guard units of the 50 states, the District of Columbia, Puerto Rico, and the organized territories (Institute for Women's Leadership, 2010). During the period of their enlistment, the citizen-soldiers who make up the National Guard work together for one weekend per month, plus 2 weeks of annual training. Although the National Guard has historically been mobilized to provide relief during natural disasters, such as floods and earthquakes, budget cuts and post-September 11 military engagements have increased the service obligations of these units to include war zone deployments. Because of these obligations, the National Guard now constitutes more than half of the country's military capability (Renaud, 2005). In the past 13 years, almost 75% of National Guard units have

been mobilized to serve in Iraq and Afghanistan alongside full-time Army, Navy, and Air Force units (Booth et al., 2007).

In the United States, a dramatic increase in the number of women in the military accompanied societal changes at the end of the 20th century, such as the move to an all-volunteer military and intensive discussion about an Equal Rights Amendment. Women now fill many roles historically reserved for men, including membership in state National Guard units. This increase in the active participation of women in the military is reflected around the world, in countries as diverse as Canada (National Defence and the Canadian Armed Forces, 2014), Norway (Skjelsbaek, 2007), Botswana (King, 2013), and Israel (Cohen, 2010).

Deployment to conflict and war zones is a difficult experience for soldiers and their families. Soldiers are exposed to harsh living conditions and dangerous work environments, often with minimal social support. Families left at home worry about the safety of their deployed soldier-member, even as they are challenged to adopt daily routines that must continue in spite of the disruption of an absent family member. During deployment and reintegration, stressors that may already be present for individuals and families are compounded by fears of infidelity, behavior and academic problems for children, and limited contact and communication during deployment

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(Johnson et al., 2007). The at-home spouse becomes a functional single parent, and these additional responsibilities and stressors can be onerous.

Many families do adjust—often with a reconfiguration of family responsibilities and duties, development of new routines, and a greater sense of self-confidence on the part of the at-home spouse when challenges are successfully met (Chapin, 2011). For other families, mental health of children or spouses may suffer during and after deployment. Multiple moves, frequent separations, and the increased hazards of deployment are typical stressors for military children (White, deBurgh, Fear, & Iversen, 2011). One study of 169 families found that children with a deployed parent had significantly more behavioral symptoms than children whose parents were not deployed (Chartrand, Frank, White, & Shope, 2008). This study did not identify which parent had been deployed, so it is not possible to know if mothers' deployment had a different effect from that of fathers. A study by the RAND Corporation found higher levels of anxiety and school difficulties among 1,500 children with deployed parents (95% of whom were male; Chandra et al., 2010). Girls and older children had more problems than boys and younger children during reintegration, and problems were more likely to be present with longer periods of deployment. No analysis was done to examine a differential effect of mother versus father being deployed.

When the deployment period comes to an end, most families eagerly anticipate the return of the deployed soldier. However, the subsequent period of reintegration after deployment is challenging for many families. Family roles and responsibilities must be renegotiated, at-home spouses may resent the loss of independence, and the deployed parent must catch up on family events and milestones that were missed (Pincus, House, Christenson, & Adler, 2001; Stafford & Grady, 2003). The ability to successfully reintegrate with families and communities is dependent on the physical health, mental health, coping skills, and coping styles of both parents (Pierce, Vinokur, & Buck, 1998; Riggs & Riggs, 2011). In many cases, soldiers "come home" to a damaged and often irreparable spousal relationship. In a survey of 25,000 male and female soldiers collected before and after deployment to Iraq and Afghanistan, 40% of married participants reported that deployment and subsequent reintegration were associated with "decreased marital satisfaction, increased intention to divorce, and increased self-reported spouse abuse, particularly at the 12-month, postdeployment time point" (Hoge, Castro, & Eaton, 2006, p. 5). Specific, acknowledged challenges for soldiers returning home without an apparent physical injury include communication, secretiveness, automobile driving, anger and aggression, the need for discipline and order, and survivor guilt (Sayers, 2011).

The trauma framework of Wiens and Boss (2005) incorporates protective factors for families, including flexible gender roles, use of active coping strategies, and community and social supports. Families at risk are those who are alone or without

unit affiliation (which includes all National Guard units), those who are young and inexperienced, and those with a "pileup of stressors" (Wiens & Boss, 2005, p. 21). The U.S. military has applied such frameworks to develop recommendations and concrete support for family resiliency. Examples are the Yellow Ribbon Reintegration Program (www.yellowribbon.mil/about.html), in which National Guard and Reserve unit families are connected with local resources before, during, and after deployments; resource lists such as those are available from the VA for Vets (https://vaforvets.va.gov/va-employees/Documents/Web_MSMReintegrationResources_2011_11_11.pdf) and Military One Source (http://www.militaryonesource.mil/deployment/military-and-family-support-programs?content_id=266643). The Department of Defense also added marriage and family therapists to their panel of mental health resources (Wiens & Boss, 2005). However, both anecdotal reports and research-based studies appearing after these changes, such as that conducted with 22 Army nurses reintegrating after tours of duty in Iraq and Afghanistan, continue to stress the need for improved interventions (Rivers, Gordon, Speraw, & Reese, 2013).

Women's Deployment and Reintegration and Families

Although differences in maternal as opposed to paternal role responsibilities exist in families predeployment, women's absence for extended periods during deployments has a different and likely greater effect on family functioning than men's (Chartrand et al., 2008; Finkel, Kelley, & Ashby, 2003). Two studies that addressed deployment of mothers were identified. Early work with 118 Navy deploying mothers found single mothers to have more separation anxiety, less family cohesiveness, and less family organization than married mothers (Kelley, Herzog-Simmer, & Harris, 1994). A second study suggested no increased psychopathology in Navy children with deployed mothers compared to Navy children whose mothers were not deployed and children with civilian mothers, but a subset of children seemed especially vulnerable to the effects of deployment (Kelley et al., 2001). This subset may have included single mothers whose deployment necessitated their children having to reside with family members; the disruption of children's lives reoccur when their mothers return. These two studies focusing on effects of deployment of mothers were conducted with women who were full-time members of the Navy, and findings cannot be generalized to women in the National Guard and Reserves.

A limitation in much of the research literature on both deployment and reintegration is the lack of distinction between the effects of women's and men's absence on family functioning (see, for example, Chandra et al., 2010). This limited gender analysis hinders understanding of how to minimize the effects of deployment and reintegration on family functioning. Perhaps because of their relatively small numbers, the potentially unique family reintegration experiences of female National Guard and Reserve soldiers have been little studied.

These soldiers lack the close presence of other soldiers as they reenter home and society from war zones and face the additional challenge of reintegration in isolation. They do not return to a base or to the camaraderie provided by soldiers and families who have shared the experiences of deployment, but rather to communities and families who may be unaware of the realities of deployment and unable to create a culture of support and acknowledgement of what they have experienced. Employers, peers, neighbors, and schools may have only the sparsest knowledge of where soldiers were posted, what their roles were, and how the family functioned in their absence (Waldman, 2009). The purpose of this study was to document the postdeployment family reintegration experiences of women in the National Guard.

Theoretical Framework

The resiliency model of family stress, adjustment, and adaptation (McCubbin & McCubbin, 1993) is a theoretical framework adapted from the work of Hill (1949) on family stress and war-induced separation and reunion within families. The model posits that specific stressors, family typology and functioning, resources, and coping actions taken to reduce demands influence a family’s reaction to crisis. Positive and negative adaptation depends on the interplay of these variables. Researchers and clinicians have used the model in working with families across a wide variety of racial, ethnic, and economic groups facing challenges such as unemployment and economic stress, head injury, violence, cardiac surgery, and alcoholism (Brody & Simmons, 2007; Hall et al., 2012; Robinson, 1997). Inspired by this work, the model pictured in Figure 1 framed this research.

METHODS

Design and Sample

A qualitative approach was used. Female members of National Guard units from Iowa, Kansas, Missouri, Nebraska, and North Dakota were invited to take part. Permission was secured

from each state to recruit women from their units via word of mouth, flyers posted at National Guard units, and announcements on the units’ Facebook pages. Eligibility criteria included being a female member of a National Guard unit and having been deployed to a combat zone. Women who had been either recently deployed or who had been deployed several years previous were eligible—with the idea of being able to sort out transitory and longer-term effects. Recruitment materials focused on family reintegration; women who were not married or who did not have children were eligible to take part, assuming a broad definition of family and that all women were part of some family.

Data Collection

Interested women contacted the investigators, and a convenient time for an in-person or telephone interview was arranged. The interview guide focused on reintegration experiences and their precedents during deployment. An interview guide based on the model shown in Figure 1 was used to develop the questions shown in Table 1.

Two counseling psychologists and one nurse practitioner, all faculty members with experience conducting qualitative research, conducted the interviews. Before completing any interviews, the primary researchers discussed their beliefs and attitudes about women in the military and their expectations of what they thought the data would reveal. Interviews began with general background questions, including participants’ age, marital status, and place and length of deployment. Interview questions included the structure of and changes to their families and support system before and after deployment, their experience of reintegration, and their family’s response to the transition (including spouse, children, family of origin, and friends). Interviews concluded with participants being asked for their recommendations that might create smoother transitions for women soldiers in the future. All interviews were audiotaped, and all interviews were transcribed verbatim.

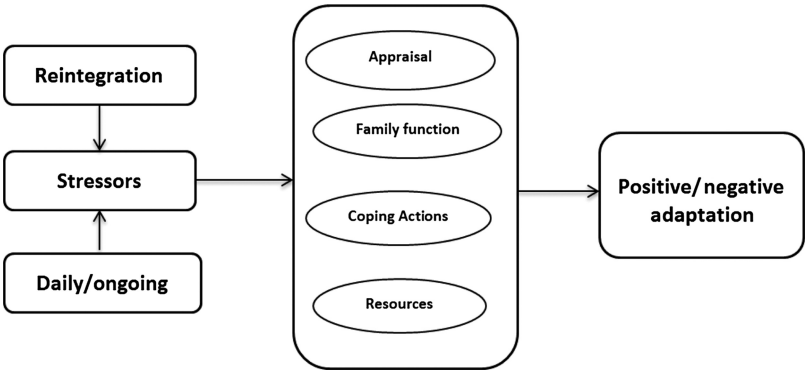


FIGURE 1. Postdeployment reintegration family resilience model. The model is an elaboration of McCubbin and McCubbin (1993), adapted with permission.

TABLE 1. Interview Guide

Variable	Initial guiding questions
Stressors	What are the specific stressors that you have experienced with reintegration? That your family has experienced? How about others in your support network?
Appraisal	How are you responding to your return from deployment? How is your family responding? How are your relationships with close friends or extended family?
Family typology, functioning	What has been your traditional support system? How, if at all, has this changed since you have returned from deployment? How has reintegration affected your relationship with your family? How has your relationship with your spouse changed since your return? Relationships with your children? With your close friends?
Coping/actions	What have your family and support network done to address the stressors?
Resources	What resources have been used? Which of these have been helpful? Which have been less than helpful?

Ethical Considerations

Because many of the interviews were conducted by telephone, an information sheet—approved by the university Institutional Review Board and by the Office of Research Protections of the U.S. Army Medical Research and Materiel Command—was e-mailed and read to each woman before initiating the interview. All participants indicated their consent to participate verbally or via electronic signature. Participants signed and scanned the consent form back to the interviewer. Anticipating that some participants might become distressed during the interviews, we allowed ample time for each interview to be able to allow participants to fully express their thoughts about any issues that might arise, and we were prepared to make referrals to community or military resources where participants could receive focused support. A few participants did become emotional while relating specific experiences, but none were distraught or unable to compose themselves within a few minutes. None of the participants were interested in receiving a formal referral for additional assistance.

Data Analysis

Guided by techniques of directed content analysis, transcripts were reviewed, and significant statements and key phrases were assigned codes by the lead author and confirmed by the two coauthors. This analytic approach is appropriate when “existing theory or prior research exists about a phenomenon that is incomplete or would benefit from further description” (Hsieh & Shannon, 2005, p. 1281). The initial step in the analysis was the highlighting all text that represented a construct of the theoretical framework, that is, family structure/typology, specific stressors, and coping actions. Text not congruent with these initial codes was assigned new codes (Hsieh & Shannon, 2005). Both supporting and

nonsupporting evidence for the centrality of family theory were captured. Areas of coding disagreement were discussed and resolved. After reaching an initial consensus of these categories and subcategories, two of the team members individually reread and coded all the data, revising and adding subcategories when needed. The second step in the analysis was the review of the text that did not fit into the initial codes. In the third step of the analysis, the team met to discuss revisions of the categories and subcategories until all of the data were coded and final descriptions for each theme and subcategory were created. Finally, the fourth and fifth stages of the analysis involved working with the data by testing emergent understandings and searching for alternative explanations; that is, we examined the data as a whole to develop a broad understanding of the patterns, including patterns that did not fit the themes resulting from the prior analysis. We reconciled discrepancies by searching for alternative explanations to the data and by modifying categorizations whenever necessary (Marshall & Rossman, 1999). Coded statements were then organized into related concept clusters. An audit trail was maintained, documenting the position of text material from which categories were developed (Miles, Huberman, & Saldaña, 2014). In reporting findings, all names and some details were changed to protect participant identity.

To ensure that the experiences of female soldiers were accurately represented and to provide a measure of trustworthiness, a summary of study results was shared with three participants for review and feedback. Their replies indicated that their stories had been represented correctly.

RESULTS

We conducted semistructured interviews with 42 members of National Guard units during the period May to August 2012.

TABLE 2. Participant Characteristics

Characteristic	<i>n</i>	%
Age (years)		
<20	2	4.7
20–29	10	23.2
30–39	5	11.6
40–49	9	40.9
50–59	1	2.3
Did not state	16	39.5
Current marital status		
Married	17	40.0
Divorced	14	32.0
Other ^a	11	28.0
Children (number)		
0	15	34.9
1	5	11.6
2–3	12	27.9
4 or more	4	9.3
Did not state	6	16.3
Deployments (number)		
1	31	72.1
2	10	23.2
3	1	2.3

N = 42. ^aSingle, separated, or engaged.

Data saturation occurred after approximately 20 interviews, but we elected to continue interviewing all female soldiers who contacted us. Interviews ranged from 15 to 75 minutes.

Characteristics of the participants are summarized in Table 2. The ages of the 42 participants ranged from 18 to 58 years ($M = 35$, $SD = 10$). Average length of deployment was 9.5 months ($SD = 4.0$), and most (31/42; 72.1%) had been deployed once. The most common deployment destination was Iraq (28/42; 65%), deployed there at least once. Twelve soldiers (28%) deployed to Afghanistan at least once. Deployments lasted from 3 weeks to 16 months ($M = 10$ months, $SD = 3.36$). Women had returned from deployment from a few months to over 10 years prior to the interview. At the time of the interview, 17 (40%) participants were married, 14 (32%) were divorced, and the remainder of the participants were single, separated, or engaged; half had at least one child. At the time of their deployment, 12 (28.6%) were not married. Ten of the 30 participants (33.3%) who were married at the time of their deployment had divorced at some point afterward.

The directed content analysis revealed five categories related to postdeployment reintegration that female soldiers felt had strongly affected them and had an impact on their families: Life Is More Complex, Loss of Military Role, Deployment Changes You, Reestablishing Partner Connections, and Being Mom Again.

Life Is More Complex

For all of the women, reintegration was a long-awaited event. However, the reality of U.S. civilian life brought several

challenges, not all of which were anticipated. For example, several women discussed the frustration and sense of helplessness they felt when faced with daily responsibilities of life that had once seemed “normal.” Planning, choosing among consumer options, and prioritizing and multitasking to manage activities of multiple family members had not been required of them while they were deployed. Rather, their tasks were assigned, singular, focused, and routine. The challenge of returning to family complexity was initially intense, and adaptation lasted from weeks to months after return. Meda, who was in her mid-40s when she was deployed to Afghanistan, said:

When you're on deployment it's the same thing every day. Nothing ever changes. It's the same thing every day and then you come home and you're reintroduced into society and there are choices that have to be made. In the military they're all made for you. You know what uniform to wear. You know where you show up for food, you know what's expected of you.

This sentiment was echoed by Becky, a single mother in her late 20s:

I remember feeling very overwhelmed by all of the choices that there were to make. I had been in an environment where my routine was the exact same every day. It didn't vary. You always knew what there was going to be to eat for lunch. You always knew what you were going to wear. You always knew what time you had to be in different places. It was very regimented. So just even going into the gas station and then looking at the 30 different kinds of soft drinks.... It took me a while to get used to having the luxury of making a decision on my own.

The two goals for soldiers on deployment were ensuring that one's job was done well and staying safe. Aspects of civilian life, like caring for a child or managing a household, were not present. Amy, a soldier from a military family, said:

When you are there, it is super easy. You just live day to day and you don't worry about going to get your mail or going to the grocery store. Basically all that you do is worry about making sure that you got to the job on time and being safe. You don't worry about really anything but your well-being and doing the job and doing it right. You don't have anybody else to take care of.... [When I got home,] I felt like I was unorganized, I didn't know how to manage my schedule, I felt overwhelmed. It was like “gosh, I got to go to work and I got to go to the grocery store and I got to do the things I have been doing for years.” I kind of had to relearn how to organize myself.

Suzanne, who was married and the mother of several children, had a very similar experience:

You're in this really regimented environment for extended length of time and everything is decided for you. You have your responsibilities to your team and to your job, but the details of life, the things that make life involved? They don't exist while you're there.

These challenges were not only frustrating for many soldiers but were debilitating and completely overwhelming for some. Meda also said:

I went to Wal-mart with my sister on the 24th of December and there were too many choices. In the military, we're not given those choices. We go into the [dining area], we get our food, we eat it, we leave. And, as a civilian, for me to shop for my family coming directly off of deployment and then try to make Christmas dinner? It was a nightmare. I completely shut down. I could not function. I could not pay. I couldn't stand at the checkout and pay. I walked outside and started crying because there were too many people, too many choices. It was very overwhelming for me.

The Loss of Military Role

The loss of the deployment role was a transition that was unexpectedly painful for some women, particularly those who did not have meaningful civilian job responsibilities or positions to which they could return. The pride that almost all of the women had when describing their military jobs and the appreciation they received for their contribution stood in stark contrast to the work that many found themselves doing on return.

Diana came from a strong military family and was just out of high school when she was sent to Iraq on the first of her three deployments. She described the challenge of her post-deployment transition:

One of the things I think that people struggle with is how to transfer the work that they are doing overseas [during deployment] into a civilian world. It's just sort of trying to fit a square peg in a round hole.

Suzanne's return from a highly responsible position in Iraq is an example of this transition:

I came home and I just felt like here I was this soldier that was awarded the Bronze Star and I had done all these things, and now I'm serving prime rib to people at Applebee's. I was like, "What? This doesn't make sense, because I was a big war hero, and now I'm like, 'Yes, would you like some sauerkraut?'" It was hard. It was hard to come home.... The minute I go on active duty, I go into "Sgt. First Class Jones mode." I don't think about sex or any of those kinds of things. [It's just] this is my job and this is what I do. It takes me about a week to ease back into it and I'm just SJ, bartender,

waitress extraordinaire. You go from, "I was making a difference when I was doing this in Bagdad" to "Would you like some ice to refresh that drink, sir?"

This sentiment was echoed by Beatrice, who, after her deployment to Kuwait, conceptualized her struggle as an issue of losing a sense of purpose:

What we sort of figured out is that I enjoy the responsibility and the missions and the tasks and things overseas. So when you come home, things don't have as much meaning and purpose necessarily. So you have to find a way to balance that. I guess you have to find a new purpose.

Some soldiers felt disappointment and a sense of abandonment after losing the civilian jobs they had prior to deployment. Cindy, a mother of school-aged children and a soldier who had been deployed to both Kuwait and to Afghanistan, stated:

It wasn't the deployment, what we did when we were there. It's really the coming home, because home wasn't ready to accept us. Home wasn't ready to provide us with that job that we had. Okay, we had job security. They give you the same job. Some of us were very lucky and very fortunate and their employers really did hold on to positions for them because they have honored what they did on paper. But, for the rest of us, the employers figure, ok well, you know I can't hold that job forever.

In addition to the difficulty of no longer having a responsible job role, some women also had difficulty with their transition back to their family role(s). The contrast between the activities of a high adrenaline, high stress, dangerous military role—often perceived as heroic—to those of a wife and mother role, perceived as commonplace, was surprisingly—and sadly—disappointing for a few women. Despite the stress Suzanne (above) experienced while deployed, the role transition was so painful that she desired to return to combat:

It was a very, very high-stress job that I held. You know, of course, we were bombed, and you know, your life of course feels threatened, you know most days. And I was just kind of caught up in that whirlwind, so to come back and to one day be armed and in uniform and then the next day be in civilian clothes and you know, be a wife and mom. It was just hard to step out of that role, if you will. It was so hard in fact, that for several months after returning I just wanted to go back. Because it was so hard to try and reintegrate.

Deployment Changes You

Most women reported strong emotional reactions to their deployment and reintegration experiences, both positive and

negative. Maria, who worked convoy security in Iraq said, "I think it's given me a greater appreciation for life and for what I have.... It changes you...makes you look at things a little bit differently." Becky, a single mother of a toddler, was very positive about returning from Iraq: "Just the tiny most insignificant things became so important and I began to see everything as a blessing."

More commonly, however, women reported negative emotional reactions, such as anger, irritability, and impatience. For some women, these responses persisted for many months or longer. Even a short, 4-month deployment to Northern Africa left Jacqueline feeling "so short-fused and easily angered and impatient and it probably took nine months." This was similar to Cindy's statement: "I just was mad at everybody."

On Ericka's return from Iraq where she worked with a company rebuilding schools, she found that

I couldn't sleep for a long time, so I was irritable because I wasn't sleeping. So I'd still say it took us about a month until we were just back into the same routine. I was very angry when I got back and I didn't even know why I was angry, I was just irritable and angry.

Some women indicated that their frustration and anger was directly related to their perception that people in the civilian world did not appreciate the importance of larger issues or took certain liberties and conveniences for granted. Linda, a soldier deployed to Afghanistan as a health administrator, said:

I came [back] both times with this incredible frustration of the world not being in a mission with me.... You know when you're in war, everybody that you are around... the units on the left and the right all know what the mission is.... When you come home and nobody's on that mission, you know the guy down the street could care less if you make it to work on time or whatever the case maybe. And, that gets incredibly frustrating with like some of the petty things you hear. You're like, "You guys don't get it. This is the mission here." That's the stuff I had to really weighing it on and change my focus on when I got home.

Some women indicated that their frustration and anger was directly related to their perception that people in the civilian world took certain liberties and conveniences for granted.

Margaret, a soldier in her mid-40s who had been twice deployed to Iraq, echoed this sentiment:

I just knew when I got back that I had a much shorter temper. I had a totally different mindset and I think most deployed soldiers do and we came back and we realize the things that everyone takes for granted every day and it kind of upsets you when you've come back from living in a tent and showering outside and using a 150 degree port-a-potty and you come back and people are worrying about things like having to wait in line because they have stuff to do. [In] Iraq you actually waited in line over three hours just for supper. Really, my patience level was not what it was prior to my leaving...I was not as easygoing as I was before I left and just angry I guess and I couldn't really tell you what I was angry about.

Reestablishing Partner Connections

Moving back into spousal relationships was a major task of reintegration, which elicited responses ranging from joy to profound disconnect. Several women mentioned the awkwardness in the return to intimacy and reconnection. Linda, with four deployments between herself and her husband, said:

The biggest stressor was learning intimacy again, learning what letting love in.... Because for a year to be gone you put, you have to put up this a barrier. If you don't protect yourself and not really let that emotion for intimacy or loving [go]...you would go crazy with [being] lonely, missing somebody. So you kind of wall that off and you learn how to communicate on the phone or in a letter...but that is really different.

Although Diana was glad to greet her husband, she added:

There's always that initial weirdness you go through when you first get back...I'm sure that men and women view this differently, but me the minute I get back, I don't want to be all touchy and kissy, and smooching with my husband because that's all he wants to do. He just wants to go right directly to that bed, and the first couple of days you're just like, "I'll get to it when I get to it. Just give me time to ease into [it] (laughing)." I'm not used to that physical touching stuff you know.

Meda's husband offered a welcome alternative:

One of the best things my husband could have done for our marriage was, he had planned a week-long vacation for just the two of us at a resort in Cancun. That was about a month and a half after I returned. And, that was a very good thing for us to reconnect...was very crucial, I believe.

Cheryl found that even a brief 6-week deployment in Iraq had a positive effect on her relationship:

If anything [the deployment] kind of made us stronger because...you appreciate each other a lot more and you appreciate what each other does...what they bring to the relationship.... So my husband, when I came back he was really wanting to spend a lot more time with me.

Several women who had distinctly negative experiences countered these positive comments. Terri was in her late 20s when she returned from Iraq: "I got divorced from my husband when I got home. I think we weren't meant for each other to begin with, but the deployment definitely brought a lot of things to light." Suzanne discussed her struggles with her relationship: "Actually, my husband and I till this day are walking that thin line of staying married and divorce. Neither of us wants to get a divorce but at the same time, it's taken a toll." Amy's partner was not supportive either during her deployment or her return:

My husband wasn't so good. It was like a punishment to me to not be supportive when I got home. He didn't take any time off of work. He had a meeting that first night. And he went to it instead of staying at home. So, it made it really tough.

Being Mom Again

In addition to the overall dynamics of families, there were the specific stressors of relationships with children. Linda said:

You don't really do anything, except your job for a year and then you come back and you have children with expectations of being cared for in some form or fashion, as simple as dinner time to all of the affection that goes along with that.

Becky stated:

I have a huge family, so being around all the kids, the increased noise like at holidays and family gatherings, there's still times that I have to just check out for a minute and go for a walk around the block or go upstairs and sit in the bedroom for a second. Not because I feel threatened, but just the chaos of the environment just gets to me. If there's a lot going on at once, I have to take a minute and regroup and then I'm fine.

Developmental changes in children during deployment, their demands, and their need for attention were a challenge. Anna, a 30-year-old soldier returning from Iraq, shared this example:

The hardest thing was having to care for other people [because] for the longest time you know you only had to take care of yourself.... For the year I was deployed, the only person I had to take care of was myself. When

I left for my deployment, he [my son] only said words and when I came home he said sentences. Not being around any type of children for that period of time it was really kind of rough [to have] somebody needing your attention, needing you to do things for them when you haven't had to do anything for anybody except for yourself. You didn't have to do any dishes because you eat off of plastic ware. The only laundry you had to do was your own. You didn't have to buy anything for anybody but yourself.... [My son] wouldn't let me leave his sight because he thought that I was going to leave him again. Every time I would leave, he would freak out. I thought I was a bad mom, even though I know I was a good mom.

Finally, there were children's problems resulting from the deployment that had to be immediately addressed. Mary Ann had been in the Guard for over 20 years and was deployed to Iraq twice:

[When I got back, my son] was failing out of school [and] there was no fixing it. I did meet with his counselors when I came home [who] said to me that M would come in there to talk because he is a great, good-hearted kid and [say] "Well, my mom is coming back in March and when my mom gets back, I always do better when she's here and she always helps me get through school. So when my mom gets back I should be doing better."

DISCUSSION

The five categories from this analysis of interviews with deployed female National Guard soldiers (Life Is More Complex, Loss of Military Role, Deployment Changes You, Reestablishing Partner Connections, and Being Mom Again) were not mutually exclusive. Both the realization that life at home is more complex and the loss of a military role contributed to the myriad of emotional responses experienced by the women and their reacting differently to the world. In turn, these reactions affected and were affected by women's need to be mom again and reestablish partner relations. We suggest that these categories might be seen as multilevel, moving from individual (Deployment Changes You) to family (Reestablishing Partner Connections and Being Mom Again) to community (Life Is More Complex, Loss of Military Role). Figure 2 shows relationships among these categories and suggests that an initial focus on addressing the needs of the individual woman might be key to effectively working with families.

The findings are similar to those found in a recent study of the reintegration experience of 22 Army nurses (Rivers et al., 2013). These researchers identified an almost identical theme to that found in this study that they called, It Just Changes You. They did not, however, see this theme as central to the reintegration experience. Participants in the study

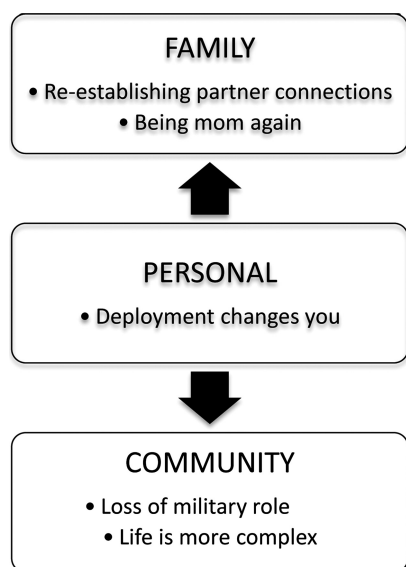


FIGURE 2. Interrelationships of the five categories, showing the centrality of the personal category Deployment Changes You to the family- and community-related categories.

also characterized the critical Stress of Being Home and their challenges in the shift of a single focus on job performance to that of the multitasking necessary in daily living (Rivers et al., 2013). Interestingly, participants did not mention family as a major theme; however, this may have been the result of the phenomenological research method used by the researchers, which began their interviews with one leading question about the major experiences of reintegration and permitted probes, “only for topics already introduced by the participants (p. 168).” Our findings add to and broaden understanding of reintegration beyond nurses to that of female soldiers in the National Guard. While the results of any qualitative study do not allow for generalizability, the similarities found in the sample of nurses (73% of whom were female) in the Rivers et al. (2013) study and the female soldiers from National Guard units in this study allows beginning understanding of the importance of addressing the impact on the women and on their families identified in these two studies.

The data from these interviews with women in National Guard units that had been deployed to combat areas were only a partial fit with the model of family stress that served as the theoretical basis of this study. The model suggested that appraisal, family functioning, coping actions, and the use of resources would affect the overall stressors. Certainly all five categories reflected the construct of stressors. The identified categories of Life Is More Complex, Deployment Changes You, and Loss of Military Role reflect the theoretical construct of appraisal/Reestablishing Partner Connections and Being Mom Again reflect the construct of family functioning. Consistent statements supporting homogenous categories of the use of resources or coping actions were not found. Participant

responses to these questions were too diverse and uneven to group and did not have the strength of the other identified categories.

A particular challenge was that, although the two categories reflected family functioning (Reestablishing Partner Connections, Being Mom Again) during reintegration, the family structures of participants were dynamic. The people and relationships that were present during deployment or return had often changed by the time of our interviews—which occurred months or years after the event. This dynamic quality made it difficult for participants to describe and for the researchers to characterize how family structure and function at the time of deployment contributed to reintegration.

The resiliency model did not include a variable that focused on the responses and experiences of individual women (Deployment Changes You), including understanding how her responses to reintegration might differ from those of a male/husband/father. An exclusive focus on family, without regard to the specific roles of or changes in individual members does a disservice to military women. An initial or concurrent application of a more woman-centered or gender-specific framework that would allow for the processing of her experiences would provide a stronger basis for future interventions. An alternative framework that might be appropriate is that of identity theory (Lomsky-Feder, Gazit, & Ben-Ari, 2008). For National Guard members, the shift in responsibilities from their deployment to their civilian role is often extreme. Griffith (2011) suggested that individual understanding of these circumstances is an important factor in establishing effective coping and adaption.

Although family needs are a critical part of this experience, the behavioral health needs of female soldiers should be considered either prior to or concurrently with the needs of their families. Effectively attending to any physical, emotional, or psychological trauma women may have experienced, both early in and throughout the reintegration process, is likely to have an overall positive effect on their families. Other useful and, as yet, unaddressed research might examine how long the effects of deployment and family reintegration last and strategies that women have used for successful adaption. For practitioners, it is important to note that many members of the National Guard and Reserves live in communities without easy access to Veterans Administration services; others may not be eligible for those services. These citizen-soldiers and their families use community schools, primary care, and behavioral health services. An understanding of the reintegration experiences of all family members can help to ensure that their needs are met during this transition.

Limitations

One limitation of this study is the self-selected nature of the sample. Participants were from several different states, but

recruitment occurred largely through National Guard Web sites and Facebook pages. The sample, therefore, largely included women who accessed these sites and had potentially greater contact with the Guard than women who only did the one weekend per month, 2 weeks per year. A second limitation is that the three researchers on this study were “outsiders” to military culture. Although expressing admiration for the role of the military in general and women who chose to serve their country through military service in particular, none of the researchers had prior experience working with military populations. This lack of experience may have prevented them from developing more in-depth, follow-up questions or probes. However, this outsider status may also be considered a strength, as the researchers were able to view participants and their responses in a clear and nonjudgmental manner.

Conclusion

Female soldiers have personal behavioral health needs during reintegration following deployment. Family needs are also a critical part of the reintegration experience. Both should be addressed when female soldiers seek help from nurses, counselors, and other health professionals. Future research is needed to fully appreciate the role of gender in reintegration.

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APPENDIX 5

Kelly, P., Nilsson, J. E., & Berkel, L. A. (2014). A gendered perspective on military deployment. *Women & Health, 54*(1), 61-76.



A Gendered Perspective on Military Deployment

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A Gendered Perspective on Military Deployment

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Military deployment, especially in combat or dangerous areas, can have a strong influence on subsequent mental health. This effect may be intensified as a result of the potential stigma that admission of mental health problems indicates weakness. Additional mental health issues exist for female soldiers from the National Guard who are pulled from non-military environments to work under dangerous conditions far from home and traditional social support. Minimal documentation is available about the day-to-day, gendered experiences of deployment for this group of female soldiers. To provide background for appropriate training and support, the aim of this study was to understand better the experiences of military deployment for women in the National Guard. We used content analysis to analyze individual, semi-structured interviews with a sample of 42 women from 7 U.S. National Guard units who were deployed in combat areas. Four general themes emerged about deployment experience: the general environment of stress, heterogeneous job responsibilities, home comes with you, and gendered stress. Military efforts are needed to address gender-specific issues associated with deployment and to develop resilience training that will optimize the mental health of female soldiers.

KEYWORDS *women, military, deployment*

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INTRODUCTION

Women are an integral part of U.S. military services and now fill many roles historically reserved for men, including membership in states' National Guard units. The citizen-soldiers of these units work together for one weekend per month and two weeks of annual training during the period of their enlistment. The National Guard has historically been mobilized to provide relief during natural disasters, such as floods and earthquakes. Budget cuts and the post September 11 military engagements have increased the service obligations of these units to a focus on war zone deployments, so that the National Guard now constitutes more than half of the country's military capability (Renaud, 2005). These changes mean that women and men in state National Guard units, more than ever before in history, experience multiple, long-term overseas deployments, often with only short time periods between assignments and limited notice of assignments (Carson & Hastings, 2012).

Societal changes in the 1970s, such as the move to an all-volunteer military and intensive discussion about an Equal Rights Amendment, resulted in a dramatic increase in the number of women in the military. Currently, more than 200,000 make up 15% of all active duty military, up from 1.3% in the 1960s; another 480,000 serve in National Guard units (Institute for Women's Leadership, 2010). However, the increase in the number of women over the past 40 years has had minimal impact on the structure and functioning of the military, a prototypically masculine institution, with a hyper-masculine culture (Keats, 2010). While the Marines no longer publicly use the slogan, "every man a rifleman," and the Air Force Academy welcoming arch no longer reads "bring me men," changes in official policies and directives to integrate women into career fields have only minimally affected the belief system of the military as "grounded in a nonnegotiable stereotypical male culture of man as protector and defender" (Butler & Schmidtke, 2010, p. 195).

Women who join the military learn to integrate rapidly into this masculine culture, and many appreciate the opportunity for both service and professional growth. Integration, however, does not ensure an ongoing equitable, comfortable environment or experience for women (Rimalt, 2007). The most notable example of negative experiences is in the form of sexual harassment and assault, which have been documented since the infamous Tailhook scandal of the early 1990s, in which 93 women and 7 men were sexually assaulted by a gauntlet of Navy pilots at a military conference (Ogden, n.d.); the subsequent follow-up revealed hostility toward investigators and protection of those responsible (Abrams, 1993). This scandal led to an initial "no tolerance" policy in the military about sexual harassment and assault. However, ongoing documentation of military sexual harassment in the popular press, in senate hearings, and from the Department of Defense itself, continues, raising serious concerns about the impact of more than 20 years of policies to address sexual harassment.

Multiple studies have found stressors related to sexual harassment and assault to be far greater among women than men in the military. For example, a sample of 815 active-duty troops found almost double (80% vs. 45%) the rate of sexual stressors in women than men; troops with such exposure had significantly poorer physical, work role, and social functioning, as well as greater mental health symptoms (Murdoch et al., 2007). A more recent survey of medical records from a Connecticut Veterans Administrations facility of women who served in Iraq or Afghanistan found that 14% reported military sexual trauma (Haskell et al., 2010). Booth et al.'s (2011) retrospective telephone survey of 1,004 Midwestern female veterans found that a quarter reported being raped in the military. Most recently, the Department of Defense's own report acknowledged as many as 26,000 cases of sexual assault in 2012, occurring in 4% of military women (Department of Defense, 2012). The chronicity and increasing incidence of these reports suggest that much work needs to be done to implement effectively the supposed "no tolerance" policy on sexual assault or harassment and to honor women's desire to serve their country by providing them with a safe environment for their service.

Unfortunately, as frequently as military physical sexual trauma is, it represents a very small portion of ignored issues and lack of sensitivity about women's gendered experiences in the military, with increasing numbers of reports of bullying and intimidation toward female soldiers (Mattocks et al., 2012). This is especially true during deployment to high-risk or combat areas where safety and unit functioning take precedence over all other issues. Complicating the deployment/gender situation is the reality that harassment is received from male colleagues and commanding officers, as well as foreign nationals who are allies being trained by U.S. troops. The foreign nationals, who may be from traditional Muslim communities in countries such as Iraq and Afghanistan, have cultural views of women's roles considerably more restrictive than those of mainstream U.S. communities and are especially unfamiliar with working side-by-side with or taking orders from women (American Bar Association, 2005).

The increasing service of women from National Guard units in deployment situations presents a unique set of stressors that do not disappear at the end of deployment. All National Guard soldiers return to their homes, jobs, and communities without the day-to-day supports and camaraderie provided by the military units of full-time soldiers working on a base. Without the physical proximity provided on a military base, they also lack regular interactions with others who have shared the experiences of deployment. For those from rural areas, emotional isolation can be exacerbated by physical isolation and the lack of a peer group of female veterans in their communities. The smaller number of women in local units means that fewer opportunities are available for sharing gender-specific experiences, such as the stressors of reintegrating with children and partners.

Minimal documentation is available about the day-to-day experiences of deployed women (Adler et al., 2005; Rona et al., 2006; Tolin & Foa, 2006). This includes the potential impact the masculine culture of the military, the very real physical dangers of deployment, and the distance from traditional sources of support may have on female soldiers' well-being upon their return. This gap in knowledge is a liability to our development of prevention and effective solutions. The aim of this qualitative study was to understand better the experiences of military deployment for women in the National Guard to provide background for appropriate training and support.

METHODS

As part of a larger study on women's family reintegration experiences, semi-structured interviews were conducted with 42 members of National Guard units from the states of Iowa, Kansas, Missouri, Nebraska, and North Dakota. This aspect of the study focused on the gendered experience that female soldiers reported. Permission was secured from each state to recruit women from its units via word of mouth, flyers posted at National Guard units, and announcements on units' Facebook pages. Eligibility criteria included being a member of a National Guard unit and having been deployed to a combat zone. Interested women contacted the investigators, and a convenient time for an in-person or telephone interview was arranged. Interviews ranged from 15 to 45 minutes. The interview guide focused on reintegration experiences (the aim of the parent study) and their precedents during deployment. Because many of the interviews were conducted by telephone, an information sheet, approved by the university Institutional Review Board and by the Office of Research Protections of the U.S. Army Medical Research and Materiel Command, was e-mailed and read to each woman before initiating the interview. All participants indicated their consent to participate verbally or via electronic signature. The participants signed and scanned the consent form and sent it back to the interviewer. All interviews were audiotaped.

Data Analysis

We conducted semi-structured interviews with soldiers using questions based on the Family Resiliency Model (McCubbin & McCubbin, 1993). The interviewers were two counseling psychologists and one nurse practitioner, all faculty members with experience conducting qualitative research and none with experience in the military. Before completing any interviews, the primary researchers discussed their beliefs and attitudes about women in the military and their expectations of what they thought the data would reveal. All three admitted to feeling like outsiders and expressed admiration for soldiers in general, and women in particular who chose to serve their country through military service.

Interviews were audiotaped and began with general background questions (e.g., participants' age, gender, marital status, and place and length of deployment). To assess family typology and functioning, we asked about the structure of and changes to their support system, their experience of reintegration, and their family's response to the transition (including spouse, children, family of origin, and friends). We also asked about stressors experienced before, during, and after their deployment, resources used by them and their families, their appraisal of these resources, religiosity, and recommendations. Individual interviews were transcribed verbatim then analyzed using a modified version of Consensual Qualitative Research methodology (CQR) (Hill, 2011). CQR is a team-oriented inductive method used to analyze qualitative data. The original phase of data analysis was completed by a research team comprised of two faculty and six students in a counseling psychology program. Before reviewing the transcriptions, the group discussed their attitudes about the material and the participants as a way to recognize and minimize the influence of bias on the analytic process.

After group training on the CQR method using two of the transcribed interviews, group members worked in teams of two to code domains and categories individually in each interview. Domains allowed the researchers to cluster similar data. Categories were then identified within each domain. Team members met, discussed, and came to consensus on the final domains and categories. Consistent with the CQR method (Hill, Thompson, & Williams 1997; Hill et al., 2005), several iterations of domains and categories were identified based on continued review of the data and discussion with the research team. This analysis yielded over 300 pages of data organized into domains and categories.

Data in the initial analysis that were coded as deployment-related were grouped for the current secondary analysis. Guided by techniques of content analysis, transcripts were reviewed and significant statements and key phrases assigned codes by the lead author and confirmed by co-authors, with areas of disagreement discussed and resolved (Krippendorff, 2013). Coded statements were organized into concept clusters of related content by one author (PK) and verified by the other two authors (LB and JN; Miles, Huberman, & Saldana, 2013). An audit trail was maintained, documenting the position of text material from which themes were developed. Themes were verified by two recently deployed women not in the sample. Their feedback was integrated into the final manuscript.

RESULTS

Participants' ages ranged from 23 to 58 years (*mean* = 35 years, *SD* = 10 years). The majority (*n* = 31; 72.1%) was deployed once; 12 (28%) were deployed twice, and 3 (7%) were deployed three times. Iraq was the most frequent deployment destination, with 28 soldiers (65%) deploying

there at least once, and 12 soldiers (28%) deploying to Afghanistan at least once. Deployments lasted from 3 weeks to 16 months (*mean* = 10 months, *SD* = 3.36 months). At the time of the interview, 17 (40%) participants were married, 14 (32%) were divorced, and the remainder single, separated, or engaged; half of the participants had at least one child. Ten of the participants who were married at the time of their deployment were divorced at some point afterward.

Participants' comments about their deployment experiences centered around four general themes: the general environment of stress, heterogeneous job responsibilities, home comes with you, and gendered stress.

General Environment of Stress

Deployment was generally reported to be a stressful experience by almost all participants, whether considered from a physical or an emotional perspective. Working, eating, and sleeping, all in an environment of physical danger, made-up the day-to-day experience of military life for all soldiers in deployed situations. While access to food, water, toilets, and a bed in which to sleep were available to all women, these were generally designed for function rather than comfort, ease, or privacy (e.g., portable toilets vs. flush toilets). Opportunities for relaxation or decompression may have existed, but they were not mentioned by any of our participants.

Sarah (all names have been changed) was married with four children when she was deployed to Iraq:

For five months, I was going at just a break-neck speed every single day. I did not get a lot of sleep the entire time I was gone. It was a very, very high stress job. We were bombed and your life, of course, feels threatened most days.

Mary, an officer, lived in a small rural community with her husband. Her first deployment was to Iraq for 15 months:

It was the first year of the war and I was responsible for 180 soldiers. The weight of that was tremendous to me. The decisions I made directly impacted the lives of soldiers and those wounded in battle.

Maya was in Afghanistan for 10 months:

We were always on alert and always on edge, just waiting.

Previously deployed in Desert Storm, Jacki did administrative work in Afghanistan:

I can't tell you how many nights I laid there in bed and couldn't go to sleep. Most people take bottles and bottles of Nyquil sell out quickly in the PX. Worrying if we get attacked, will it go through my building, what will happen? The buildings [where I lived] are no longer there. [I later saw] pictures of the place where I lived and where I slept and where I worked in my office and it was up in smoke, in a big ball of flames.

Heterogeneous Job Responsibilities

Despite being officially barred from direct combat roles, participants had an amazing variety of roles, ranging from those traditionally filled by women (administrative assistant and cook) to those that few women have in civilian society (bodyguard, helicopter mechanic, and crew chief). While some of the participants came to the military with relevant education and skills, others received training and education as part of their military experience to enable them to meet specific job responsibilities. Women reported both positive and negative attitudes toward their job responsibilities. Some of these jobs brought an inherent level of physical and emotional stress for participants, who perceived them in a variety of ways.

Nancy, 25 years old, had been in the National Guard for 6 years:

I was an aircraft mechanic. It was the hardest thing I've ever done in my entire life. It was basically, work, eat, sleep, work. That was how I tore my ligaments. It was an over-use injury from the repetitive work . . . trying to complete my tasks because our bodies didn't have enough rest. They actually sent a couple other guys home with the same problem, but mine didn't surface until the very last month, but they decided to hold me and just put me in braces and give me a supply job.

Amanda was 24 years old when deployed to Iraq. She joined the National Guard to help pay for college, but then found out more was involved:

Convoy security, we provided security for civilian trucks and military trucks. We were the gun crews that escorted trucks from base to base all over Iraq. We would have five gun trucks for every convoy.

Maya:

The security force, we were the ones responsible for maintaining security and running the convoys and the patrols and just assuring that everybody was safe.

Anne was deployed to Afghanistan with both her cousin and her fiancé:

I'm a base cop for the air force, on the flight line. We were in charge of loading people on and off the flight line making sure nobody was messing with the planes. We also did all of the fallen comrade ceremonies for whenever a military person, the United States or any other country passed away.

Other jobs provided satisfaction and even excitement. Cindy had been in the military for over twenty years and deployed three times:

I was a combat historian, and it was the best job ever. We traveled all around the Baghdad area, I think to 35 different FOBs [forward operating bases] and basically recorded interview after interview [about] the soldiers' stories. We collected photographs, data, artifacts that kind of stuff and I absolutely loved what we did.

Jennifer was the mother of two school-aged boys:

My job changed to going outside the wire [beyond the secured perimeters of a base] with the Colonel. I'm going to tell you, it was the most fun I'd ever had. It was scary, but it was fun. My idea of Iraq and what I saw were two totally different things. I thought prehistoric times, no they're not prehistoric times—you see a mud hut with a satellite dish on it. Wow! You see the way they live their lives, versus reading it in books. It's very different.

Home Comes with You

Despite or perhaps because of the distance from home, the lack of ability to address family problems intruded on the experiences of many participants. Partners, children, and parents were all mentioned as sources of worry and concern that could only be minimally addressed from afar. Pearl was worried about her husband who was also in the military but not deployed; he was jealous of Pearl's deployment. She was also worried about her mother:

My mom has been a substance abuser my entire life. Three months before I deployed, she moved back in with us . . . I was concerned because she had three suicide attempts.

She added:

[I saw] women who have been deployed who have children and watch their Facebook pages to see what they are going through at home because they are single parents. They don't know what their children like and want. My daughter has been a big part of my life and . . . I was

so worried [because] a year is a long time, and a year changes a child so much.

Nancy:

I found out [my husband] was cheating on me, and it became a big deal because he didn't want to wait for me to come home. He wanted a divorce.

Amy was the divorced mother of two older children:

My daughter, at age 19, had just got picked up for drunk driving.

Kit's husband was very opposed to her deployment and actually had her removed from a previous deployment list:

We had a very volatile relationship. He spent every dime . . . he bought a truck. Through the course of time I was gone [he bought] six motorcycles, went on three vacations, just ungodly amounts of money. I'd check my bank account when I was over there, working my ass off, and he's out there feeling sorry for himself, going on vacation every month.

Gendered Stress

Even for women who had significant experience with the military, the day-to-day harassment during deployment in Iraq or Afghanistan—solely for being female—was a shock for some participants. Some stated that it was a challenge to function as soldiers without constantly being reminded of their gender. A few participants discussed their segregated living quarters, which were provided in the spirit of caring or safety; however, separate quarters necessitated time-consuming logistics, like having to wait for transport from these quarters. Such separation and resultant logistics could be used to undermine the competence of female soldiers by suggesting that females were less able to care for themselves and needed special accommodations. A few participants also mentioned feeling observed in daily activities or of having to prove constantly their competence and toughness.

Diana, a service academy graduate who was an officer before joining the National Guard, was the most eloquent on this theme:

When we got there, they told us that the base is not safe for females. There have been rapes. There have been situations, so do not go out by yourself. Do not walk around without somebody else with you. Probably the hardest part for us was that [our living quarters] were segregated

from the men, and it was difficult to get around. We didn't have dedicated transportation and were always having to wait on rides and ask people to pick us up, so it felt like a lot of your independence was really taken away, especially when you are in charge of people and used to expediency.

She added:

It was an eight to one ratio when I was in the academy. I have been in a male-dominated career field before. This was the first time that I really felt that I was uncomfortable. I think part of it was just the cultural barriers; the Afghanis looked at you different ways because we weren't covered, and there was a lot of Afghan interaction where I was working. It was very different to see a [female] officer.

Nancy:

We were literally sexually harassed every single day. All it is over there, all the boys can think about over there, is sex. It's horrible. You can tell them "no" a thousand times, and they still won't get it. You have to lock the doors. You have to take your weapons with you into the showers because the local nationals will try to walk in on you if they think you are the only one there. There were several rapes. It was not a pleasant experience. I had to be on guard 24 hours a day. I had to watch my shadow. I always had to wonder if this person who is talking to me, you know, is going to try something. You had to go everywhere with a battle buddy.

Sally, aged 40–49 years, worked as a plumber in Afghanistan:

They tested all of us females for STDs before we left. They only tested the females. No males were tested. As females we were singled out as far as leaving the FOB [forward operation base or protected area]. I was not allowed to leave the FOB. I even went up as far as the brigade, requesting to go on a mission and was turned down. My sergeant, who was the other female in my platoon, was overlooked, too. Everybody in my squad but me went on a mission. And they want us to hold true to, "You are a soldier. You are not a female or a male. You are a soldier." I don't believe that! The discrimination that was put forth . . . It's there. So, learning how to live with discrimination. Learning how to deal with that as a female.

An alternative gendered response was that males become overly protective of the women with whom they worked or were close. Leslie, an officer who had been in the military for more than 20 years, was the single mother of a 13-year-old child when she was deployed to Iraq:

I was actually the only female officer out of 40 men in the battalion, and so for me it was very, very hard because as a female you want to make sure you are as tough and as strong as the men . . . We did deploy with three other states. We had a total of four different units other than our unit, which was the headquarters. Some of the male soldiers in our unit were very protective of us, and so they wouldn't like it if some of the females were to venture out and build friendships with people in one of the other states. It would just cause a lot of confrontation. They were like more of a parent versus just letting us or other females being just who they were and venture out.

Andrea was 18 years old when she was deployed to Iraq for a year:

My relationship [with my boyfriend over there] was good. There were certain aspects I didn't like. If I was supposed to go out on patrol with some on the guys, he would volunteer to take my place. You know, it was nice but I didn't ask him to do that. He wouldn't tell me he did that. He would just go out.

DISCUSSION

Women join the military for a variety of reasons, including service to their country and the opportunity for growth. The findings of this qualitative study suggested that women we studied in the National Guard indeed experienced job opportunities that might not have been available to them as civilians, but some of them seemed to pay a high price for such opportunities. While the stress of a combat deployment environment in terms of work and safety may be inevitable, some women in our study reported facing an extra layer of stress from concerns about their families at home and from sexual harassment or gendered stress. Although premobilization training is available to orient soldiers to the realities of deployment, our results indicated that the training did not fully prepare them for the intensity of their experiences.

Minimal information is available about how women handle the deployment-related stressor of leaving behind partners and children. While a variety of authors have documented the impact of deployment on families and spouses at home, these studies often assume that the spouses are women and the deployed are men, or do not examine differences between female and male deployed soldiers (Chartrand, White & Strope, 2008; Fisher, Zaslavsky & Blendon, 2008). We acknowledge that male soldiers likely experience some variation of the "home comes with you" theme, but believe that it is important to document women's experience of this phenomenon in the context of the role that they typically

play in families, which differs in significant ways from men. Studies that have compared the impact of parental deployment on children have found no differences in impact by the gender of the deployed (e.g., Applewhite & Mays, 1996). However, these studies have not examined the impact of family separation on women (mothers) compared to men (fathers). Because, in our society women continue to provide the bulk of childcare, concerns about separation from their children may well be different from those of men and contribute differently to their deployment stressors.

Both inside and outside of the military, ample documentation is available of the effect of low-level harassment and gendered stress on women's physical and mental health. In addition to relevant psychiatric symptoms, such as post-traumatic stress disorder (PTSD), anxiety, and depression, sexual stressors have been associated with work, role, physical, and social functioning, and increased somatization and health care utilization (Murdoch et al., 2007). Sexual harassment and assault actually has as great an impact on PTSD symptoms as combat exposure (Dutra et al., 2011). While current policies on gender discrimination and harassment are indeed welcome by women in military units around the world, the formal *de jure* response has not been able to address the *de facto* culture of sexism and discrimination (Burke, 2004; Butler & Schmidtke, 2010). However critical they are, these policies are but one small part of the culture change necessary to ensure safe and equal treatment of female soldiers.

On their return home, some deployed women in our study reported bringing with them the cumulative effect of high levels of stress. Such stress may complicate some women's readjustment and their reintegration into family life and has an impact on their mental and physical health, as well as on their daily functioning (Sayers et al., 2009; Vasterling et al., 2008). High rates of PTSD, alcohol and substance use, depression, panic disorder, fatigue, concentration problems, and suicide have been found among females after deployment in prior studies (Gibbons et al., 2012; Seelig et al., 2012). While it is difficult to compare divorce rates between the general U.S. population and the military, several women in our study had been divorced since their deployment, citing their deployment as a critical factor in ending their marriages. Longer-term studies are needed to assess the duration of these deployment-related stressors and the strategies and services used by women to address them.

A limitation of the present study was the nature of the sample. While participants were from several different states, recruitment occurred largely through National Guard Web sites and Facebook pages. The sample, therefore, largely included women who accessed these sites and had potentially greater contact with the National Guard than women who only did service one weekend per month, two weeks per year. Thus, the sample was unlikely to be representative of all National Guard women who have been

deployed, thus limiting the generalizability of the findings. Also, the focus of the present analysis, as a secondary data analysis, did not make up the main set of questions asked of each participant, so additional relevant information may not have been thoroughly explored. A final limitation was the lack of completely independent coding of the original transcripts by two or more researchers, which could have compromised the quality control of coding.

CONCLUSIONS

The deployment experiences reported by participants have important implications for their post-deployment mental health. The reintegration issues faced by these National Guard members do not occur in an environment on a military base that would provide daily contact with others who experience these concerns (Lane et al., 2012). The reintegration of female members of the National Guard occurs in communities across the country, with family and friends generally having minimal understanding of why women participate in the National Guard, of the deployment experience itself, or of PTSD symptoms and their relationship to deployment. While it is critical that the military, the National Guard, and the Veterans Administration all work to ensure the availability of appropriate support and services, those who are health care or mental health providers, or who even live with or work alongside of female National Guard soldiers who have been deployed, also have a responsibility to reach out and offer support.

On a program level, support could come from the simple availability of a venue in which women might meet across ranks to share experiences and strategies during deployment. On a personal level, this could come in the form of an offer for a quiet cup of coffee or an acknowledgment of gratitude for the service provided by the woman. Service providers, such as medical workers, mental health professionals, and child care staff, can work to ensure that they have the training needed to ask about and respond to deployment-related issues confronting military families, especially those related to family dynamics when the deployed service member returns home. As a community member, one can advocate for the needs of military women, perhaps by ensuring that the local Veterans of Foreign Wars (VFW) chapter is welcoming to women. Many ways are available to address this on a personal/local level, including suggestions from the Web site (Retrieved December 25, 2013, from <http://www.realwarriors.net/guardreserve/reintegration/thankguardreserve.php>.) “7 Ways to Thank National Guardsmen [sic] & Reservists,” which lists a variety of activities, such as participating in an event to welcome home service members or volunteering at a Veterans Association facility. The return to home and community for

female soldiers in the National Guard should not have to be an exacerbation of the stress of deployment.

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